COMMERCIAL CAR JOURNAL

FEBRUARY 1961

CONSTRUCTION SECTION
follows page 114

THE MA

A CHILTON PUBLICATION

MANAGEMENT



DENVER CHICAGO TRUCKING CO.. INC.



How D' CTeamwork Sparks Success

... PAGE 99

CP MAKES YOUR MECHANICS QUICK-CHANGE ARTISTS

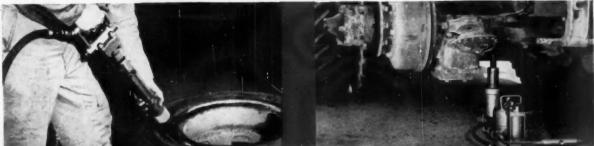
These 3 air-powered tools can help you keep equipment on the move



CP-791 "JUMBO" AIR-WRENCH

1" Square Drive 1%" Bolt Size

Putting them on or taking them off, this "Jumbo" was built with the rough ones in mind . . . no job too tough! And 6" extended shank makes it easy to clear large hubs in deep wheels. Supplied with VARI-TORK Power Converter . . . that provides the right torque for every fastener . . . and a Power Regulator that fits power to the job.



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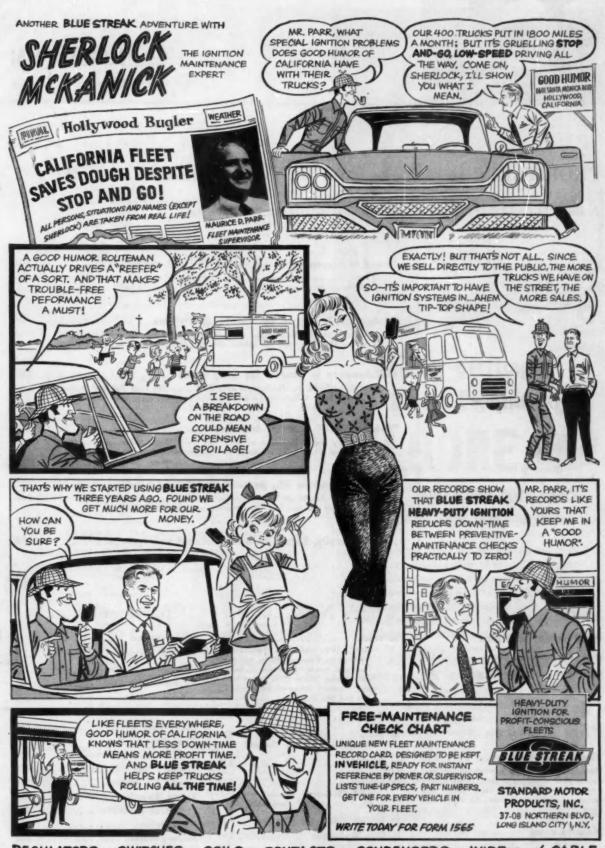
Write for your copy of the new CP Automotive Catalog SP-3042 for latest facts on the industry's "Most-Wanted" Line of Air and Electric Service Tools.

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AIR AND ELECTRIC TOOLS . IMPACT WRENCHES . DRILLS . BREAKERS . PNEU-DRAULIC JACKS AND PUMPS . ZIP-GUNS

More details? Circle 123 on reply card inside back cover



PROFITABLE fleet ideas from DENVER-CHICAGO 99

A NEW 16-PAGE REPORT BY CCJ'S MOBILE EDITORIAL TEAM

Sound management is secret of efficient growth 100
Teamwork, business know-how, daily position briefing for department heads, a basket ball team to play a part in Denver-Chicago's coast-to-coast success
Equipment is key to profitable operations 104
Rolling stock is standardized when it comes to basic components, but not so mucl so that D-C can't get the newest and best in competitive bidding
Maintenance is geared for long hauls 107
With the basic standardization, simplified programs keep PM and repair costs down despite tough vehicle usage on long legs of D-C's coast-to-coast haul
"Bridge Deck" controls big shop 100
Two-story island in center of shop has Parts Dept. below, all maintenance office on second. From here, all areas of "run-through" shap can be seen
Terminal planning fills present and future needs 112
Here are details on how freight is handled plus a rundown on D-C's PU&D flee where light tractors and short trailers are becoming the thing
and finally, Salute to a magnificent safety record 110

including . . .

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Society of Automotive Engineers 204
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LOS ANGELES, CAL.

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Full bead support-achieved through exclusive 3° tapered bead seats which lock both tire beads firmly in place-would be enough to end bead chafing. But Job-Master goes even further!

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- 3° tapered bead seats for compression fit.
- Rubber sealing ring and round valve hole plus Bond-A-Coat finish to minimize corrosion and erosion.
- Integral flange and bead seat for better balance and alignment.
- Standard 28° mounting bevel for full interchangeability.



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EDITORIAL COMMENT

The Doyle Report—New Round of Intrigue

H OTTEST item in Washington transportation circle last month was the "Doyle Report." Chances are good that you will never see a copy . . . or need to.

But you will be hearing a good bit about it. Hence you need to know that it exists and, very basically, what it purports to do.

The Report itself is a 900-pager prepared by a special task force headed by Maj. Gen. John P. Doyle (USAF-Ret.). It took two years in the making, was authorized by the Senate Interstate Commerce Committee and paid for—to the tune of \$400,000—by you . . . and you . . . and me.

Its major recommendations (most of them summarized in one 277-word sentence) are briefed on page 39 of this issue. Its major purpose: To recommend changes and updating in the Transportation Act of 1958. Note the italicized word recommend. The Doyle report is not an official document. There is some discussion whether it will even be printed. But it does set forth guide lines for legislative thinkers.

To us, the most interesting part of the report was the immediate reaction in Washington. Obviously and rightly, to each special group it has a totally different significance. After all, there were 900 pages to choose from. But here's what we mean . . .

- For the Private Truck Council of America, it signals a new wave of problems for the longhaul private truck operator including possible redefinition of "private carriage".
- For the largely common-carrier-dominated readership of ATA's *Transport Topics*, it "favors more rate competition," and drew this

editorial comment: "In all the scores of thousands of words of the Doyle Report there is little that has not been kicked around before."

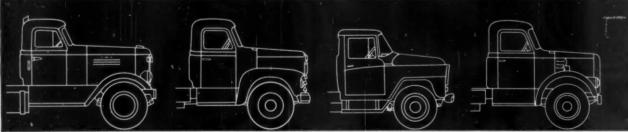
- For the Truck Trailer Manufacturers Assn., it meant probable postponement of any possible increases in axle loadings until "legislative action has been taken to insure that (trucks) pay their equitable share of highway
- For the National Highway Users Conference (and all highway users), it meant that "part of the cost of the federal-state highway program should be paid from general funds."
- For readers of Railway Age, "the report opposes the railroad industry's bid for more freedom to operate other forms of transport . . . suggesting, instead, a drive to develop joint-rate and through-rate arrangements."

From CCJ's Washington Editor Neil Regeimbal came this intriguing summary:

"The Doyle report is an interesting treatise in transport theory. It is one of the many government reports, where a commission or a committee spends many months and many dollars, but pioneers little fresh ground. Most either gather dust or become the starting point for 'further or continuing study.' Some are used by speechwriters. And a few even do become useful research tools."

So why all the fuss? Simply because the report does contain important ideas. As we have seen, it means different things to different people. Since it has semi-official status it could add new fuel to new tries for anti-truck legislation. It cannot be ignored.

Bart Rawson Editor



123-in. bumper-to-back-of-cab dimension—GCW range of 68,000 to 79,000 lbs. Selection of "In-line" or V-type diesel engines.

108-in. BBC dimension with GCW range of 42,000 to 65,000 lbs. "Sixes" with diesel, gas or LPG power. Single or tandem axles.

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INTERNATIONAL VCO-200 model has tilt-cab design for greater service accessibility. GCW ratings in this series from 55,000 to 65,000 lbs.

INTERNATIONAL TRUCKS

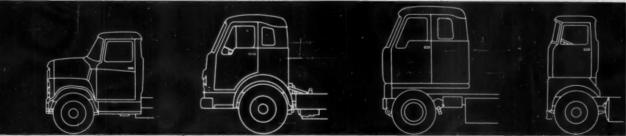
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In "balloon freight" hauling, it's the bumper-to-backof-cab dimension rather than the chassis weight that is the vital factor in increasing cube capacity. For example, a tractor with a short BBC measurement can boost your cube capacities by pulling a longer trailer. International not only has the dimensions to fill your requirements, but also a variety of front-axle positions to meet any state bridge formula regulation and provide maximum load distribution.

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54, 72, 80-in. (shown) BBC dimension in GCW range of 55,000 to 127,400 lbs. V-type or "in-line" diesels, V-8 gas. Single or tandem axles.

48-in. BBC dimension, in GCW range of 50,000 to 65,000 lbs. V-8 engines; single or tandem axles.



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297. NEW APPROACH to safety for station wagons and small commercial vehicles. Rubber channel seals glass in . . . moisture out.

Fast Flush for Cooling Systems
GMC Steering Stop Screws
Battery Hold-downs
1960 Ford Brakes
Ford Truck Air Brake Pressure
Anti-Freeze and Aluminum Engines
Plymouth and Valiant Pan Bolts
Comet Fuel Filter
Rambler Cylinder Head Cap Screws
Spark Plugs and Ignition Systems
Corvair Oil-Filter Center Bolt

Fast Flush for Cooling Systems

DON'T JUST DUMP anti-freeze in the cooling system and figure it's winterized! Flush the system first—and fast—with a new easy method from DuPont. Complete job takes fifteen minutes without removing drain plug from the engine block. Here's how it's done:

- · Drain radiator.
- Remove thermostat and reconnect its housing.
 - · Disconnect upper radiator hose.
- Plug upper radiator neck with a cork or suitable stopper.
 - · Open heater valve to let it drain.
 - · Close radiator drain cock.
- Remove radiator cap and insert water hose in filler neck. Run water through at medium pressure.

Passage of the water through the entire cooling system does a good cleaning job. To finish it up, remove the plug, reinstall thermostat and reconnect upper radiator hose.

In tests at DuPont on a number of rusty cooling systems, the water came out clean in less than five minutes.

GMC Steering Stop Screws

STEERING TROUBLES and excess wear on front end of heavy-duty GMC trucks may be due to faulty adjustment of the stop screws. These are installed in the steering knuckles and stop against the axle center in Model Nos. 450 through 500. If stop screws are set-in too far, road shock can put too much load on the



TIMELY NOTES ON TRUCK, BUS, PASSENGER CAR
FLEET MAINTENANCE and OPERATION
briefed by ED SHEA, Technical Editor

steering gear. Also, the wormshaft nut may bottom on housing end cover before the stop screws contact axle center.

Stop screws should be set with truck on an alignment machine to factory specifications, which give setting for each model in degress.

Battery Hold-downs

WHEN installing batteries, be sure hold-downs are not too tight. The battery case may become distorted or cracked, sealing compound may be loosened and cause acid loss from the cells. A loose hold-down permits the battery to be damaged by road vibration and jarring.

In either case, loss of battery acid usually results in corroded terminals and cables, causing high resistance in battery connections which in turn weaken the battery's power and shorten its life.

1960 Ford Brakes

HERE'S A tip from Raybestos that will be helpful when adjusting left rear brakes on 1960 Ford and Thunderbird cars. The adjusting slot in the left rear backing plate is located to the rear of the vertical center line instead of to the front of the center line. This means that the star adjusting wheel assembly is reversed in its position. Therefore, the adjustment screw must be turned in the opposite direction than on the other wheels to take up the brakes. In other words, the adjusting spoon should be moved away from the axle.

Ford Truck Air Brake Pressure

LOW AIR PRESSURE at brake chambers on 1959-60 Ford F-T-B series trucks can pre-(TURN TO PAGE 12, PLEASE)

These top-quality enable you to do



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Wagner Lockheed Hydraulic Brake cylinders, cups, boots, pistons, springs, washers and hose—marketed as repair and replacement parts—are manufactured to the same specifications, by the same machinery in Wagner plants, as Wagner parts used in complete assemblies for original equipment.

Another time-saving factor important to you is that the Wagner Lockheed line of hydraulic brake parts is the most complete on the market. It includes hard-to-find numbers not easily obtainable elsewhere. Every make and model vehicle is covered. Parts are obtainable individually or in factory sealed kits. Cylinders are supplied in complete assemblies, or parts may be purchased separately.

POWER BRAKE REPAIR KITS for cars and trucks equipped with power brakes are part of the Wagner line. As acknowledged leaders in the field, Wagner is first with a complete line of power brake repair kits which include a "HOW-TO-DO-IT" Installation Instruction Sheet in each package.

These quality products are available from your regular supplier of Wagner Lockheed Brake Parts, Brake Fluid, and Brake Lining. Ask him for details, —or mail the coupon for a FREE copy of AU-500.

AND REMEMBER when ordering air brakes specify WAGNER LOCKHEED AIR BRAKES—the system with the rotary compressor.



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Whether your fleet has 5 or 500 units the kit will be a valuable working tool. The new ICC Safety Regulations are effective July 1, 1961. Get your free kit today! See your jobber or simply attach this page to your letterhead and mail direct to Arrow Safety Device Company, Georgetown, Delaware.



IF YOU
HAVE NOT
TRIED THIS
TEST...SEE
YOUR ARROW
JOBBER...YOU'LL
BE AMAZED!



ENGINES



Continued from Page 9

vent full control valve travel and/or full dump of reservoir pressure. Ford says this may be caused by interference between the lower dash panel and the foot control valve pedal arm.

To check for this condition, install a 150-psi gage at the reservoir drain cock hole and one at the rear brake chamber. Compare gage pressure readings at full dump. If they're off by more than 5 psi, insert a temporary spacer between the brake valve plunger and the treadle roller and recheck the pressure readings. When pressures are within 5 psi, rework the control valve as follows:

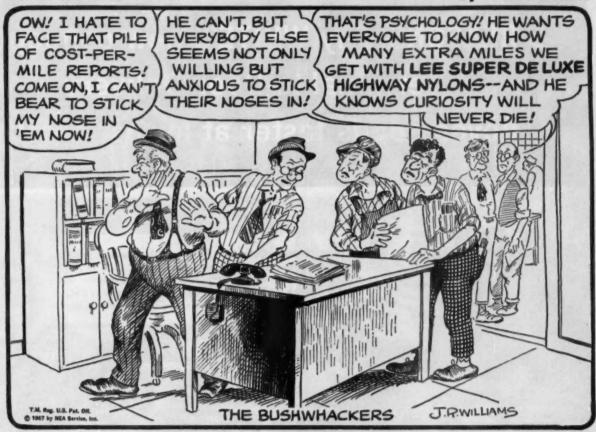
- 1. Remove pedal arm and rubber dust boot from the control valve.
- 2. Remove boot and valve actuating plunger. Remove dust boot from plunger.
- 3. Position and silver solder a 1/16-in.-thick flat washer with 1-in. outside diameter to the flat end of the plunger as shown.
 - 4. Reassemble.
- 5. Trim about 1/16 in. off pedal arm rebound bumper to compensate for the additional length of the reworked actuator plunger and to be sure you'll have full return of the pedal arm.
 - 6. Attach pedal arm to valve assembly.

Anti-freeze and Aluminum Engines

COOLING SYSTEMS on some '61 makes of cars with aluminum block engines should not be filled with alcohol-base anti-freezes. American Motors, for instance, suggests using permanent type anti-freeze specifically recommended by the manufacturers. AMC's service dept also says the solution should be drained annually and replaced to give effective protection. Also, some radiator cleaners contain strong chemicals which should not be used in aluminum blocks. Water with chloride content over 100 parts per million should be avoided also.

Plymouth and Valiant Pan Bolts

H ERE'S what to do to reduce the possibility of oil pan gasket leaks on the 225 cu in. Plymouth engine or the Valiant engine. A recent service bulletin says when installing the oil pan (TURN TO PAGE 16, PLEASE)



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The Lee Super DeLuxe Highway Nylon Truck Tire costsless per mile. That's because its premium features result in long original mileage and greater carcass strength for multiple recaps.

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2. PDQ gets into the tough spots, has maneuverability that reduces delivery time. Model C-15 with

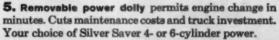
4. PDQ is faster and easier to operate. Through cross aisle, convenient controls, full head room, ex-

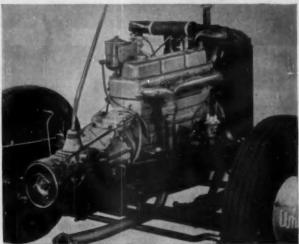


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of terrain.

"CHIEF"
PREMIUM
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HEAVY DUTY
BRAKE BLOKS

22

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Product of Carlisle Corp. Molded Materials Div., Ridgway, Pa.

FLEET CARS



Continued from Page 12

on these engines, torque the cap screws to 200 in. lb in the sequence shown below.

Be sure to tighten numbers 1, 12, 17 and 4 in this sequence. Then tighten either pan rail, followed by the rear (2) and front (4) cap screws.

Comet Fuel Filter

OMET SENDS us this tip on its 1961 model. Due to its design, it's possible to install the new fuel filter "backwards" in the fuel line. For maximum serivce life, the filter should be replaced in the fuel line with the arrow head (printed on filter case) pointing toward the carburetor. This arrow is to indicate direction in which fuel should flow through the filter.

Rambler Cylinder Head Cap Screws

THREE DIFFERENT length cap screws are used on the Rambler 6110 aluminum cylinder block. It's important to use the right screw in the right hole.

Installing one of the 5 9/16-in. cap screws where a 5-in. one is required will cause the bolt to bottom giving an incorrect torque when the cylinder head is tightened.

Spark Plugs and Ignition Systems

A RECENT REPORT from Joe Geschelin, CCJ's Detroit technical editor, tells us about the Second Ignition Performance Conference sponsored by Champion Spark Plug.

Champion says that not all of its complaints from customers in the field result from bad plugs. The company's field service people came up with a variety of complaints on engine operation. Champion recently analyzed results of 189 fleet service calls in which plugs were allegedly involved.

The following list shows causes of faulty engine operation with numbers indicating the sampling of engines examined in these fleets. In some cases, there was a combination of faults. In addition to this list, 15 calls showed evidence

(TURN TO PAGE 20, PLEASE)

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or how "The Biggest Difference in



"One of our most severe runs is the 300-mile stretch from Saginaw to Chicago," writes W. C. Blair, President of Great Lakes Express.

"This is the heart of the snow territory, so for months at a time, it's mighty tough sledding. And since some of the cargo we carry is easily frozen, liquid latex, any breakdown could be costly.

"A little over two years ago, we switched to Hi-Miler Cross-Ribs. Since then, they've pulled us through winter hazards in fine style, every time. And they've averaged about 147,000 miles so far, as against the 65,000

we used to get with standard tread tires. What's more, most of them look good for lots more before recapping.

"This is definitely the lowest cost-per-mile we have ever experienced."

Reports like these—and we get many of them—are particularly satisfying. For they prove that Cross-Ribs are delivering all the dependable miles we build into them. Look at the diagram and you'll see what we mean.

The big differences you get in Cross-Ribs are typical of what you can expect from any truck tire in the complete

GOOD

windfall in snowfall discovered CROSS-RIBS

the Business" drove tire costs to a new low



Goodyear line. They give you long tire-life insurance in the form of the biggest, strongest beads plus the toughest bodies, made with exclusive Triple-Tempered 3-T Process Cord (nylon or rayon). And, through use of advanced super-toughening agents, Goodyear tires run longer than competitive makes.

What's more, all Goodyear Truck Tires are better built for today's smoother-riding trucks. Whatever the size or number of your trucks, you'll be miles ahead when you buy or specify Goodyear. See your Goodyear dealer or write: Goodyear, Truck Tire Dept., Akron 16, Ohio. Lots of good things come from Goodyear.



KEEP MILEAGE COSTS DOWN WITH GOODYEAR MILEAGE ENGINEERING SERVICE

New Goodyear service helps you get maximum benefit from longwearing Goodyear Truck Tires. For example, the new Goodyear Cross-Rib/Rotation plan of tire scheduling enables you to make most effective use of Cross-Ribs—keep your trailer tire needs in balance. Provides new lows in capital investment and cost-per-mile. For information, write Goodyear, Truck Tire Dept., Akron 16, Ohio.



Hi-Miler -T. M. The Goodyear Tire & Rubber Company, Akren, Ohio

YEAR

MORE TONS ARE HAULED ON GOODYEAR TRUCK TIRES THAN ON ANY OTHER KIND

COMMERCIAL CAR JOURNAL, February, 1961

More details? Circle 138 on reply card inside back cover



Photo courtesy of Clark Equipment Co.

Keep your equipment on the job longer with regular Oakite cleaning

Regular Oakite maintenance cleaning can boost your profits because it helps keep your earth-moving equipment out of the shop and on the job longer.

Time-saving, money-saving Oakite cleaning materials help keep your equipment on the go. There are specialized Oakite materials and equipment for every maintenance cleaning job, including:

- Dissolving carbon deposits
- · Banishing grease, oil and sludge
- Stripping paint
- Removing rust
- Descaling radiators

—and many more. Your local Oakite man will be glad to tell you all about them and how you can save money and time in your preventive maintenance cleaning operations. For his name and a free illustrated booklet describing Oakite cleaning materials, send to: Oakite Products, Inc., 26D Rector Street, New York 6, N. Y.



Technical Service Representatives in Principal Cities of U. S. and Canada

ELECTRICAL



Continued from Page 16

of detonation damage to pistons, valves or plugs. Here's the rundown:

Wrong spark plug heat range	55
Wrong spark plug gap	9
Improper spark plug servicing	3
Defective secondary cables or plug boots	27
	12
Worn-out breaker contact points	25
Incorrect condenser capacity	6
Wrong cam angle (over 2 deg beyond limits) 2	20
Defective distributor rotor or cap 2	23
Defective coil	6
Reversed coil polarity	24
Incorrect ignition timing (more than	
3 engine deg beyond limits)	37
Incorrect automatic advance (more than	
	20
Incorrect carburetion (more than 1.0	
air/fuel ratios beyond normal limits)	18
Incorrect valve lash (more than .002 in.	
beyond limits)	7
Inoperative heat riser valve	3

Much discussion at the Conference was aimed at spark plug behavior and what can be done to improve overall engine operation. First agreement reached was to stick to factory specs for ignition timing and spark plug range.

However, current ignition distributor designs must be taken into consideration. They introduce many variables which affect individual cylinder timing on a given engine and produce combinations of late and early firing. Of course, each engine has an optimum location for the spark plug and gap in the combustion chamber. Width of the gap affects idling as well as fuel economy. Proper plug heat range must also be selected.

Champion stated that a torque wrench isn't necessary for installing spark plugs. If the plug is reasonably tight it will function properly. When plugs are removed for engine servicing, it's important to keep them clean. Some ignition troubles have been traced to the shorting effect of paint sprayed on plugs when the engine was painted.

Some spark plug deposits are caused by crankcase oil leakage past the valve guides. To correct it, install a commercially available valve seal kit.

As for spark plug replacement, Champion still holds out for 10,000 miles. In a good fleet PM program, plugs should be serviced at 4000 to 6000-mile intervals.

Conversion to LP gas results in cleaner en-(TURN TO PAGE 24, PLEASE)

BRAKE MAINTENANCE TIPS FROM GREY-ROCK

Road Calls

Road calls for brake service are an expensive—and sometimes unnecessary-part of fleet maintenance. Proper preventive maintenance and correct mechanical procedures can reduce road calls to a minimum.

Listed here are a number of common causes of road breakdowns, some caused by carelessness or improperly trained mechanics, and some caused by lack of a good preventive maintenance program.

COMPLAINT	CAUSE	REMEDY
Wheel locked (air and vacuum)	Cam turned over Camshaft stuck	Inspect lining regularly and replace before this can occur. Check for bind in camshaft bearings when relining, and at regular intervals. Check for bent brake chamber pushrod or bind in brake chamber.
Wheel locked (hydraulic)	Bonded lining came off shoe Brake shoe stuck	Examine regularly. But remember, bonding failure usually occurs within a day or so after a reline. Lubricate contact surfaces between shoe and back plate.
Wheel locked (air, vacuum and hydraulic)	Oversize lining with standard drum or undersize drum with standard lining Bent or broken shoe incorrect adjustment	Check drum diameter and lining thickness before installation. Examine before installation. Adjust properly and road test.
No brakes (air or vacuum)	Loss of air pressure Diaphragm or hose failure	Compressor should be replaced periodically. Diaphragms and hoses need regular replacement.
No brakes (hydraulic)	Hydraulic wheel cylinder failure	Wheel cylinders should be checked regularly for leaks.
Broken brake drum (air and vacuum)	Unbalanced system	Check balance regularly to see that each brake is doing its share of work.

To keep road calls at a minimum, follow these rules:

- Institute a comprehensive preventive maintenance program based on actual operating conditions and see that it is carefully followed.
- Train mechanics to make them familiar with the items that may cause road failure and instruct them to replace questionable components when servicing a vehicle.
- Use only top-quality materials to lessen the possibility of premature failure.

Brake Blocks, products of extensive experience and research, provide smooth, balanced brake action in every wheel and from axle-to-axle.

Grey-Rock Balanced Trucksets and You get more miles between relines, fewer scored drums, less downtimepaying off for you in lower operating cost-per-mile.

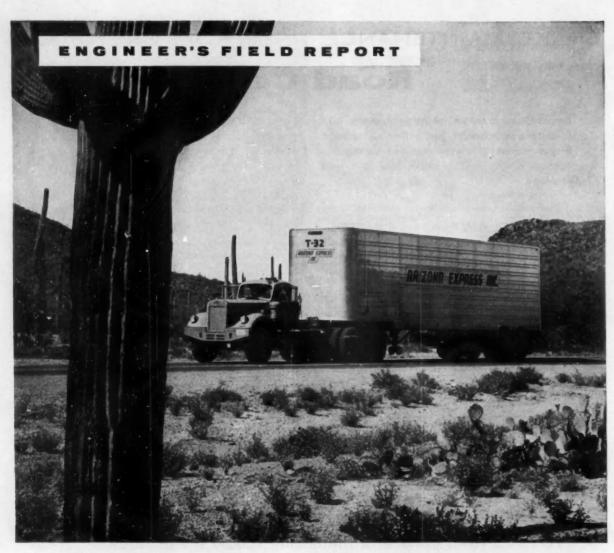
For information about the common

break-down problems, how to handle them and prevent them, see your Grey-Rock jobber-or write Grey-Rock Division of Raybestos-Manhattan, Inc., Manheim, Pa.

BALANCED

BALANCED BRAKSETS . TRUCKSETS . BRAKE BLOCKS . VEE-LOK® CLUTCH FACINGS . AUTOMATIC TRANSMISSION PARTS

You Can't Buy a Better Brake Lining to Save Your Life



195,000 miles... but cylinder taper only .0001" using RPM DELO Oil

Highway tractors of Arizona Express, Inc. operate in extreme heat and cold, dust and snow . . . yet RPM DELO Special Oil protects them so well they show remarkably little engine wear.

Routine inspection of 200 h.p. Cummins engine in White tractor (above) revealed only .0001" cylinder taper, though it had run more than 195,000 miles. Tractor was returned to service without overhaul.

Firm's 17 White tractors all have run more than 200,000 miles. Fleet Supt. Roy Holloway says, "Oil pressure is still good in all these engines . . . we expect them to go at least another 100,000 miles before major overhaul."

Arizona Express also uses RPM DELO Special Oil in 13 GMC tractors. Older than the Whites, some of these have gone more than 600,000 miles without removing engines from the chassis.

RPM DELO Oil reduces wear and prolongs engine life because it clings to parts whether engine is running or idle. An anti-oxidant fights gum and lacquer formation, and a special detergent keeps parts clean. Other additives prevent bearing corrosion, crankcase foaming.

Why not try RPM DELO Oil? Let it cut your costs, lengthen equipment life. Just call your local representative or write any company listed below:



STANDARD OIL COMPANY OF CALIFORNIA, San Francisco 20 - STANDARD OIL COMPANY OF TEXAS, El Paso California oil Company, Perth Amboy, New Jersey - Denver, Colorado

TRADEMARK "RPH DELO" AND CHEVRON DESIGN REG. U.S. PAT. OFF



Both can be tough to pilot!

It's a highly responsible job and no simple one to pilot that airliner. But, actually, the job is toughest on take-offs and landings. Otherwise the pilot is usually flying on "automatic."

The truck driver has a rugged job, too. He "takes off" and "lands" practically all the time. He strains through traffic. He bounces over bumps, chuckholes, occasional detours. On long hauls, constant vibration and road shock are rough and tiring.

One piece of equipment every driver deserves is a seat that removes fatiguing roughness—a Bostrom Viking T-BAR* Suspension Seat. Then the jolts, jars, road shock and vibration are soaked up in the suspension system instead of in the driver's body. He keeps happy, healthy, alert—more efficient, more productive.

It pays to equip your new—and older trucks—with Viking T-BAR Seats. Available from your truck dealer or parts distributor.

Trade-Mark





NEW VIKING T-BAR SUSPENSION SEAT

Features a simplified, advanced design and engineering achievement to remove fatigue from truck driving. It soaks up practically all road shock and vibration, abserbs jolts and bounces from extra-rough roads, and has comfort-contoured seat cushions.



MORE TRUCK TARP TIPS FROM REEVES

COVERLIGHT IS 10 WAYS RIGHT FOR YOUR RIGS

- Completely waterproof cargo protection.
- 2 Tough nylon, coated with synthetic rubber.
- 3 Lightweight. One man handles it easily.
- Easy to maintain, lasts longer, cuts costs.
- Resists weather, abrasion, most acids and oils.
- Won't rot or mildew, even when stored wet.
- 7 Never stiffens in cold weather. Always pliable.
- Won't shrink or stretch.
 Always a perfect fit.
- Wide choice of weights and colors.
- Available in hypalon, or neoprene coated nylon.

COVER RIGHT WITH COVERLIGHT!

SEE YOUR TARP SUPPLIER OR WRITE TO: DEPT. CC-2

REEVES VULCAN

Reeves Brothers, Inc., Vulcan Products Division 1071 Avenue of the Americas - New York 18, New York

FLEET CARS



Continued from Page 20

gines as well as major reduction in plug fouling. One large bus operation was cited in which plugs were used for 28,000 miles without fouling or missing. Champion noted that the benefits of LP gas conversions have been reported in Commercial Car Journal, most recently in Sept. 1960, page 100—"LP gas saves more than \$550 a year per truck for Southern Materials Co."

An item subject to criticism at the meeting was the heat riser. Sticking seems to be the main problem. It's one thing to watch for and is a matter that requires improvement in design.

It was also brought out that there's a trend in recent years to resistor-type ignition wiring. Life expectancy of resistor cable should be about three years on passenger cars and somewhat less for commercial vehicles.

Corvair Oil-Filter Center Bolt

CHEVROLET stresses that, on the Corvair, the oil-filter center bolt must be torqued to 15 lb ft. If the bolt is tightened to 25-lb ft torque, the nylon gasket may split or the neoprene seal may be damaged.

Result: An oil leak in either of these areas which will cause rapid loss of engine oil.

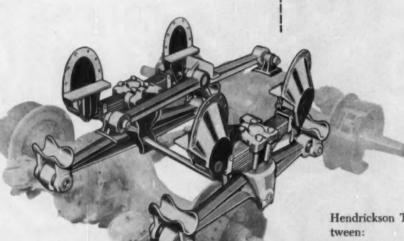


"This I call my old lady's carburetor sandwich—
IT MAKES ME WANTA CHOKE 'ER!"

For lowest operating costs specify a

HENDRICKSON TANDEM HERE

- Steel, rubber or air springs in one basic design
- Combination of 4-point frame mounting and perfect axle alignment
- Reduced tire wear, elimination of maintenance requirements
- Inherent stability plus exclusive equalizing beam feature which reduces effect of road irregularities 50%
- Heat treated lightweight forged steel or forged aluminum equalizing beams available for all 3 Series of Hendrickson Tandem Suspensions



AGAIN LAST YEAR
... more than 2 out
of every 3 six-wheel
trucks were factory
equipped with
Hendrickson Tandem
Suspensions

Hendrickson Tandems are interchangeable between:

- Trucks, tractors and trailers
- · Various makes of drive axles
- Tag and pusher axles

Each offers proven weight savings. Parts inventories can be reduced! Fleet operators can specify the design best suited for each particular operation.

8001 WEST 47TH STREET LYONS (CHICAGO), ILLINOIS



















...the

158 SERIES

rounds out a

complete

New Line

TRACTORS from 45,000 to 60,000 lbs. 6CW



* COMPACT DESIGN - 90" BBC

FRA A

- Wider choice of power: Gasoline, up to 200 hp; Diesel, up to 160 hp.
- New stronger frame with minimum weight.
- Wide track front axle.
- · New cab; fiber glass engine housing.
- Enlarged frontal area and cooling system.
- Set-Aside fenders for easy maintenance.
- New improved front suspension and steering linkage.



Compact and Power-packed

BROCKWAY

HUSKIES ... medium-size ... economy-wise

More models to match more jobs! With addition of the brand-new 158 Series, Brockway now offers a complete line of intermediate-size Huskies . . . ideal all-purpose trucks that maneuver easily in short-haul service, yet have the power range for fast, profitable, over-the-road transport, too.

These compact Huskies are low in operating cost and long on service, with many money-saving, mile-making features. They include exclusive Uni-Matched design which means that all components of Brockway trucks — power train, chassis, cab and hundreds of functioning parts — are fully coordinated in one smoothly operating unit.

This means job-matched performance and maximum economy and efficiency. Solid reasons for seeing your Brockway representative for complete details on the new line of medium-size Huskies.

BROCKWAY MOTOR TRUCKS, CORTLAND, N. Y.
Division of Mack Trucks, Inc.

More details? Circle 145 on reply card inside back cover





... and for

Black & Decker

tools. Black & Decker maintains 50 factory service branches plus authorized service stations to give your B&D tools the attention mechanical products need periodically. Keep your B&D tools in top condition, on the job all the time.

Only factory parts and fac-tory-approved methods are used. Fast service and reasonable cost, always.

SWIFTY SERVICE says he sure to ask about: FREE TOOL INSPECTION no cost, no obligation.

STANDARD B&D **GUARANTEE** after completion of all recommended repair work.

You'll find the location of the nearest B&D repair facility in the Yellow Pages under "Tools-Electric," or write for address to: THE BLACK & DECKER MFG. Co., Dept. 5402-S, Towson 4, Md.





FEBRUARY

16-19—International Automotive Service Industries, Annual Show, Memorial Coliseum, Los Angeles, Cal.

Cal.

18-26—Chicago Automobile Show, Mc-Cormick Place, Chicago.

22-24—Materials Handling Institute, Pacific Coast Show, The Cow Palace, San Francisco, Cal.

23-25—Louisians Motor Transport Assn., Annual Convention, Jung Hotel, New Orleans, La.

24-26—Industrial Relations Commit-

24-26-Industrial Relations Committee, American Trucking Assns., Meeting, Americana Hotel, Miami Beach, Fla.

MARCH

5-8-American Road Builders Assn., Annual Convention & Exhibit, Chalfonte-Haddon Hall, Atlantic City, N. J.

6-9—Common Carrier Conference-Ir-regular Route, Annual Meeting, Americana Hotel, Miami Beach,

— Movers & Warehousemen's Assn. of America, Annual Con-vention, Boca Raton Hotel, Boca Raton, Fla. 9-11

13-16—National Truck Leasing Sys-tem, Spring Executive Confer-ence, Boca Raton Hotel, Boca Ra-

ton, Fla.
7 — National Furniture Warehousemen's Assn., Annual Meeting, Palm Beach Biltmore Hotel,

Palm Beach, Fla. 16-19—Colorado Motor Carriers Assn., Annual Convention, Broadmoor

Annual Convention, Broadmoor Hotel, Colorado Springs, Colo. 21-23—National Assn. of Fleet Ad-ministrators, Annual Conference, Sheraton-Cadillac Hotel, Detroit. 22-24—Assn. of Highway Officials, North Atlantic States, Annual Meeting, Hotel Traymore, At-lantic City, N. J.

APRIL

1-9—International Automobile Show, Coliseum, New York City.
6-7—New England Bus Assn., Annual Spring Meeting, Schine Inn, Chicopee, Mass.
8-12—Petroleum Equipment Suppliers Assn., Annual Meeting, Greenbrier Hotel, White Sulphur Springs, W. Va.
9-12 — Western Highway Institute, Annual Membership Meeting, Arizona Biltmore Hotel, Phoenix, Ariz.

Ariz.

Ariz.
10-12—American Transit Assn., Western Regional Meeting, Pioneer Hotel, Tucson, Ariz.
10-21—American Welding Society and International Institute of Welding, Annual Convention & Experition & ing, Annual Convention position, Commodore Hotel (AWS,) Sheraton-Atlantic Hotel (IIW), Coliseum (Show), New 11-13—American Society of Lubrica-tion Engineers, Annual Meeting Bellevue-Stratford Hotel, Philadelphia.

11-14-Middle Atlantic Regional Automotive Show, Exhibition Hall, Philadelphia.

13-15—National Truck, Trailer & Equipment Show, Automotive Council of Los Angeles, Great Western Exhibit Center, Los Angeles, Cal.

18-20—American Transit Assn., Mid-western Regional Meeting, Con-rad Hilton Hotel, Chicago.

20-22-Alabama Trucking Assn., Annual Convention, Buena Vista Hotel, Biloxi, Miss.

21-22 — Pennsylvania Motor Truck Assn., Annual Meeting, Bellevue-Stratford Hotel, Philadelphia.

23-26—Customer Relations Council, American Trucking Assns., Spring Meeting, Shoreham Hotel, Washington, D. C.

27-30—Georgia Motor Trucking Assn., Annual Convention, Jekyll Island, Ga.

30-May 2—National Tank Truck Car-riers, Annual Convention, Neth-erland-Hilton Hotel, Cincinnati, Ohio.

30-May 2—Operations Council, American Trucking Assns., Meeting, Atlanta, Ga.

MAJOR EVENTS LATER IN '61

Sept. 11-15-Society of Automotive Engineers, National Transportation Meeting, Milwaukee Auditorium, Milwaukee, Wis.

Sept. 20-22-National Assn. of Motor Bus Owners, Annual Convention, Drake Hotel, Chicago.

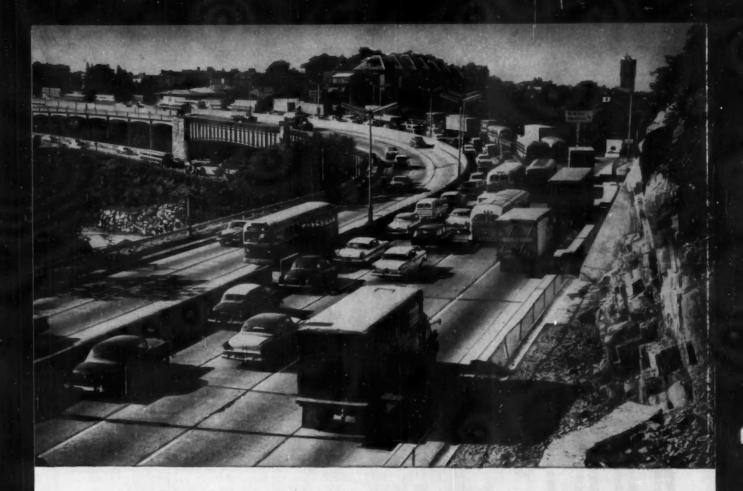
Oct. 1-5-Truck Body & Equipment Assn., Annual Convention, Sherman Hotel, Chicago.

Oct. 8-13-American Trucking Assns., Annual Convention, Statler & Mayflower Hotel, Washington, D. C.

Oct. 15-18-American Transit Assn., Annual Meeting, Dallas, Texas.



"My wife found out how well the log book works . . . now I have to keep one from when I leave the house until I get home again!"



B&D Valve Refacers get 'em back on the road faster and keep 'em there!

When trucks, taxis, rental fleets are on the road they're making money and Black & Decker Valve Refacers get 'em there faster-at less cost!

B&D's super-speed air chuck grips and releases valve stems instantly for maximum speed, accurate alignment every time. Offset spindle enables grinding of all valve face angles from 0° to 90°. Two motors insure smoothest power, constant speed features like these add up to one big profit-saving

Your equipment is in the shop less time-doesn't come back for expensive "do-it-overs"! See for yourself, in your own shop. Mail coupon for demonstration. For sales or service look in the Yellow Pages of your telephone book under



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Towson 4, Maryland, (In Canada: Brockville, Ont.)
□ Please arrange a demonstration of B&D Refacers □ Please send additional information on
NameTitle





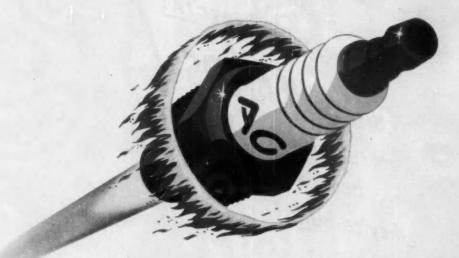


hot tip for truck



AC SPARK PLUG S THE ELECTRONICS DIVISION OF GENERAL MOTORS

PERFORMANCE



You need peak power performance to turn payloads into profit. AC Fire-Ring Spark Plugs are your best bet for top performance! They're made truck-tough to sustain maximum power in your truck engines. Always select performance-proved AC Spark Plugs.

PERFORMANCE

In light-duty applications—AC's exclusive Hot Tip heats faster to stay clean longer—cools faster to prevent power-robbing pre-ignition.

PERFORMANCE

In all applications—ACs are engineered to meet each engine's exact power requirements for maximum efficiency. AC offers you the industry's most complete spark plug line.

PERFORMANCE

In heavy-duty applications—AC's superior sealing qualities prevent gas leakage, assuring longer peak power output for continued pace-setting performance.



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POWER ACHIEVERS FOR THE TRUCKING INDUSTRY



HEATING AND VENTILATING DIVISION

Durable, dependable, rugged. Evans heaters are built for trucks! They're tailored to truck manufacturer specifications. They're custom-engineered to provide the right BTU rating and proper heat distribution for your specific truck models. And they're designed for quick-and-easy maintenance.

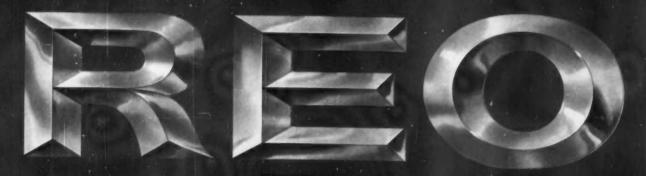
Twenty-five years of engineering experience—plus rigorous tests and assembly-line inspections—go into the

production of every Evans truck heater. This product quality has made Evans the largest manufacturer of heavy-duty truck heaters. And because of confidence in the quality of its products, Evans backs its heaters with a one-year/50,000-mile warranty.

Regional Representatives:

Chicago, R. A. Lennox Detroit, Chas. F. Murray Sales Co. Allentown, Pa., P. R. Weidner

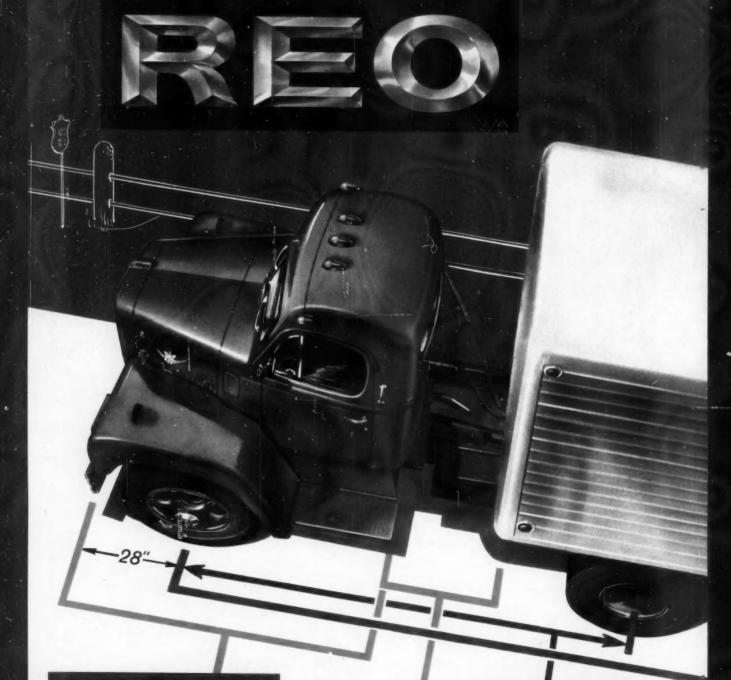




new series



FLEET DE SIGNED 90 INCH BBC TRACTORS



ONLY FO INCHES FROM FRONT

All Reis "D' aveier tractors have a sumper in Section of sub-like Commonwealth of sub-like Commo

AMPLE CLEARANCE

Cab to trailer clearance is adequate with virtually any combination of trailer name contour and king pin pasition.

JOB DESIGNED

WHEEL BASES

The standard wheelbase for most 130 inches, giving a full 72-inches, giving a full 72-inches. CA impositement. Inis combination, resulting and in standard measurements on the front axis of her anymotoling play by Red A wild a sample of a liferal inheologies in six-lack increments from standard are available to measurement.





INCH BB

HAUL MAXIMUM LENGTH SQUA

CONFORMS WITH ALL ERIDGE FORMULA STATE LAWS

on extremely short from table to from bumper measurement (20 inclus), the flee "D" a seally designed for use in the so-called "Eridge Farmule" stated. With maximum is ers, flee "D" tracies put a world of space between the from mactor axis and he rear he. This means began payloads in those states with bridge farmula

the Trappara Radione

CTRACTORS

JARE NOSE TRAILERS LEGALLY

367

G cylinder GASOLINE TRACTORS



130 TO 185 HP

The Reo "D" series offers three models using the famed Gold Comet six cylinder engines. From 130 to 185 horse-power, these engines are acknowledged leaders in the gasoline engine field. Powerful, economical and dependable, these engines are proven by millions of miles on jobs throughout the world. High efficiency, long life, and low cost major repairs are yours with Reo's "wetsleeve" engine construction. Trucking's most modern and use-proven engines in Reo's new 90-inch BBC cab . . . A package of power unsurpassed in the industry.

A wide choice of single and two speed rear axles with capacities from 16,000 to 23,000 pounds are coupled with the proper transmission for every job. Five, seven, and eight speed transmissions . . . Also the incomparable ReoMatic, the proven choice in fully automatic transmissions.

MODEL GCW RATING

D-303 38000

D-403 45-50000

D-503 55000



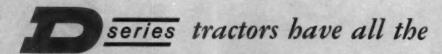
cylin



207 TO

For big-muscle we Gold Comet V-8 of beat . . . For the to hauls, and the hea combination of Reand Gold Comet V money maker. Th heavy duty V-8 trable to the truck Reo Gold Comet power engine pack in a weight savin sleeve" construction and lower costs.

More driver room to contend with be engine length. Five transmissions. Rear Axle capacit 38,000 pounds. For truck models in 4 x able in Reos V-8



REO FAMOUS FEAT

eries fleet designed for bigger over the highway payloads





O 235 HP

working power, Reo 7-8 engines cannot be ne tough jobs, the long heavy loads, the new Reo 90-inch BBC cab et V-8 engine is a real The most proven of 8 truck engines availrucking industry, the net 207 or 235 horseacks a world of punch aving package. "Wetuction means long life

om as no "dog-house" h because of short V-8 Five and eight speed . . . ReoMatic also. acities from 18,000 to Four tractors and four n 4 x 2 and 6 x 4 avail-7-8 "D" series.

GCW RATING

D-603 65000 D-703 78000 D-633 78000

D-733 78000



iesel TRACTORS



180 TO 250 HP

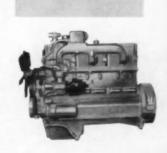
For the ultimate in diesel power, Reo now offers three models combining the 90-inch BBC dimension with the greatest name in the world of diesel engines . . . Cummins. Proven Cummins diesel power plants from 180 to 250 horsepower. Reos six foot wide cab gives the ultimate in driver comfort, safety and convenience.

Reo's D-703D is a single axle tractor while the D-633D and D-733D are tandem axle models . . . Each is job designed for over-the-highway service. Diesel operators can now pull maximum length trailers dependably and economically. A wide range of rear axles including a new big 181/8 inch diameter ring gear single reduction axle rated at 18,000 or 23,000 pounds capacity and 78,000 pounds GCW.

D-703D 60-78000

D-633D 60-78000

D-733D 60-78000



- Greater Maneuverability
- Wider Choice of Components
- Power and Gearing to Fit the Job
- Performance—Economy—Dependability

REO MOTOR TRUCK DIVISION

THE WHITE MOTOR COMPANY LANSING 20, MICHIGAN







FLEET HIGHLIGHTS AS REPORTED BY COMMERCIAL CAR JOURNAL . FEBRUARY 196

Six important reports challenge fleet managers in 1961

For fleet managers, Washington was a source of frustration last month. Six important reports were made. All could have serious impact on your fleet operation. All did have serious defects. . . .

Carrier

One was too long. This is the Doyle Report. Submitted as a working tool to the Senate Committee, it includes enough so every kind of fleet will find something to its liking . . . and to its dislike. Emphasis is on competition between types of carriers, but it reaches further than that —including highway taxes and sizes and weights. You'll get some idea of its immediate impact and how dangerous it really is by reading the special report on page 5—"The Overload"—in this issue.

Sizes and weights

Two were lacking important data. These are the 210 Report ("Who pays how much for what size highway?") and the Vehicle Size and Weight Report. Both are incomplete because data from AASHO Road Test will not be available until mid-summer. Size and Weight Peport recommends "no change" in Interstate Highway size and weight limits as set by Highway Act of 1956. At least until "detailed analysis of the Road Test data" is completed, is the way the Report puts it.

"Who pays how much?" American Trucking Assns. terms the 210 Report "woefully inadequate and incomplete." Reason: It omits entirely the "incremental" approach to highway costs. ATA points out that both Bureau of Public Roads and Dept. of Commerce have called this method the principal one in determining the proportionate share of highway use taxes each vehicle weight class should pay. Without AASHO Test findings as to how much highway wear increases as gross weights increase, says the 210 Report, it is impractical to include incremental cost studies. American Road Builders Assn.'s first reaction to the 210 Report was that ". . . it does not present the answers or even attempt to draw specific guidelines for the drafting of the highway revenue legislation needed in 1961."

Higher fuel taxes

Fourth report masked bad news as good. This was a brief report to Congress saying that cost for Interstate Highway System remains "unchanged" from earlier estimate of \$41 billion. Federal government's share of this also stays at \$37 billion. But, says the report, present federal highway use taxes will fall \$11.6 billion short of meeting this. At press time, Congress was considering a recommendation to extend the "temporary" 1¢ per gal fuel tax beyond its scheduled June 30, 1961, expiration date . . . add to it another ½¢ per gal . . . continue both through 1972. This would put the federal fuel tax at $4\frac{1}{2}$ ¢ per gal. But with 47 state legislatures meeting this year—most looking for more highway revenue—you're likely to be socked with more than just a boost in federal use taxes.

Last two reports recommend sweeping changes in present government regulation of transportation. These go by the names of the Landis Report Transport regulation

and the Legislative Oversight Report. Basically, they ask that administrative functions of various transport regulatory agencies (including the Interstate Commerce Commission) be concentrated under control of the President . . . probably under a new Cabinet post, Secretary of Transportation. One source referred to the changes as proposed as more bureaucracy . . . new regulators to regulate the regulators. In brief: While much of both reports is sound, whether greater efficiency results will depend largely on how the recommendations are carried out.

What's ahead in vehicles, components, highways and highway costs?

Reports made in two big meetings held last month will have much impact on your fleet's future operation. Society of Automotive Engineers, at its annual meeting, took an in-depth look at what the next 10 years may bring when it comes to vehicles and their components. Highway Research Board did the same for the highways you'll be using—taxes, subsidies, safety, speed, etc. Brief summary: There's a wonderful future for fleets. You'll find significant highlights on pages 188 and 204.

ATA Regular Common Carrier Conference Maintenance Committee meets

Maintenance Committee of ATA's Regular Common Carrier Conference met last month, took a dim view of plastic insulated wire. Main reason: Hot wires due to shorts melt the insulation, lead to extensive re-wiring. Committee also asked for a better governor, such a governor, it said, should be tamper-proof and should control both road speed and engine rpm. It also asked for a special branding area on tire sidewalls. Also discussed were manufacturer vehicle gross weight ratings . . . and the now-being-worked-on revision of AASHO vehicle size and weight limits.

Study gives propane nod over diesel for Chicago buses

Chicago Transit Authority should continue to give emphasis to use of propane-powered buses. So concludes a study by the independent consulting engineering firm of Arthur D. Little, Inc. (It cost almost as much as two new buses.) Little says use of propane buses would save at least $3 \not \in a$ mile. Critical point was that diesel maintenance costs based on the 1946-47 vintage diesel buses presently in CTA's fleet were well above maintenance costs on CTA's propane coaches. However, on Little's recommendation, CTA has ordered 300 new diesel buses to see if their costs make them more competitive with propane units.

Warranties, trucks, trailers, tires, parts and prices

Most makers have made public announcement of a 12-month/12,000-mile warranty on trucks . . . A 12-month warranty applies also to its new vehicles, says Dorsey Trailers . . . Over a third of transit buses built by GM in the past 15 months included air conditioning . . . Six out of 10 semitrailers shipped in 1960 were in the 38-40-ft group, reports TTMA . . . Chrysler's MoPar Division says it's going to market remanufactured parts nationally . . . Fruehauf is dropping prices on its trailers, tank trailers and truck

In thousands									Truck and Bus Tires			
of units, except bus sales are in actual		Truck trations		Factory Demestic		Trailer ments		Factory Domestic	Replacement Shipments		Original Equip. Shipments	
numbers	Nev.	11 Months	Nov.	11 Months	Nov.	11 Months	Nov.	11 Months	Nov.	11 Menths	Nov.	11 Months
1960	67.5	870.2	73.9	894.7	3.5	58.7	307	3647	649.3	8608.1	254.8	3642.1
1959	73.8	878.2	38.0	877.7	5.6	65.7	170	2020	737.1	9275.9	188.7	4132.1

Truck tonnage

Touck	and	R	Production	

	Weeks Ending		Year to Date		
	Jan. 14	Jan. 7	1961	1960	
Chevrolet. G. M. C. Diamend T Divon Dodge and Fargo. Ford. F. W. D. International	6,480 1,332 25 60 1,372 5,973 27 2,508	5,420 1,057 23 48 1,061 4,878 12 1,798	11,900 2,380 48 108 2,453 10,851 39 4,306	19,538 4,349 153 160 3,700 18,289 42 5,684	
Mack Studebaker White Willya Other Trucks	211 304 1,757 70	160 160 222 1,403 70	371 526 3,160 140	616 313 798 4,414 145	
Total-Trucks	20,119	16,172	38,291	58,201	
Buses	75	80	125	200	
Total—Trucks and Buses	20,194	16,222	36,416	58,401	

Sources: Truck and bus data—Automobile Manufacturers Asen. Tonna
—American Trucking Asens. Registratione—R. L. Polk & Co. Trailers—Det
of Commerce. Tires Pubber Manufacturers Asen.

Week Ending	% Change from Previous Week	% Change from a Year Age
January 14 January 7	+17.5 +13.7	- 8.2 + 6.2
December 31	-11.0 - 3.9 -12.6 - 0.1 +18.2	+ 5.5 +18.6 -15.2 -, 5.1 - 5.6
November 26 November 19 November 12 November 5	-17.5 + 4.0 - 8.4 + 0.9	- 5.6 - 2.2 - 6.0 + 1.3
October 29 October 22 October 15 October 8	- 3.7	- 4.1 - 1.5 - 1.4 + 0.7 - 1.0
September 24 September 17 September 10 September 3	+18.1	- 2.1 - 1.1 + 0.4 + 0.4

bodies—\$140 on a 35-ft aluminum "Volume Van," up to \$745 on a 9500-gal aluminum tank . . . New truck tire with blend of natural and new synthetic rubber in the tread runs 15 to 20 deg cooler to give a third more mileage, claims U. S. Rubber . . . Industrial Rayon says it has a new Tyrex tire cord 10 per cent stronger than present Tyrex cord . . . National Safety Council survey of 85,156 fleet passenger cars showed four out of 10 were equipped with safety belts.

International shows aluminum components, a new diesel engine

At last month's preview of its new C-line trucks (page 121, this issue), International also had on show lightweight versions of its heavy duty DCO-405 and DF-405 models. Featured were aluminum conventional and sleeper cabs, frames and cross members, radiator, transmission case, fuel tanks, flywheel housing, front and rear hubs, wheels, rear axle walking beams and saddles. Powering the COE DCO-405 was a 250-hp @ 2100 rpm diesel listed as an International Model No. D-817.

Trailer makers get details on new foamed insulation for reefers

At Truck-Trailer Manufacturers Assn. annual meeting late last month, R. A. Hammond of duPont cited "... a growing interest in lower shipping temperatures for frozen foods." It appears, he said, "... that new, high efficiency insulating materials are needed..." He went on to describe advantages of foamed insulation. (Watch March issue for details.)



A QUICK LOOK AT WHAT'S COMING TO HELP WITH YOUR ADVANCE FLEET PLANNING

1960 figures show truck taxes higher than ever

Special taxes on all motor vehicles reached \$10.5-billion in 1960 as compared to 9.6-billion in 1959, reports Automobile Manufacturers Assn. Trucks alone produced \$2.9-billion of the 1960 total against \$2.7-billion in 1959. Total truck registration as the year closed reached a record 12 million, about 300,000 above 1959. Also ahead of 1959 by almost 5000 was 1960's bus registration of 270,000.

ICC says union contract does not free carrier from safe driver rules

Union contracts do not free carriers from responsibility to comply with safety regulations, said Interstate Commerce Commission in a recent accident report. Especially, says ICC, a carrier must "insure that its drivers are qualified and its vehicles safely operated . . ."

Car carriers hard-hit by railway competition

Railroads are going after new car hauling in a big way. Plan 2 piggyback made the first inroads, now two- and three-level flatcars rigged to haul eight to 15 cars are in the act. Some 1800 of these are reported on order. Michigan Trucking Assn. estimates almost one-third (4600) of haulaway drivers are unemployed. Of piggyback in general, Wall Street Journal quotes Jimmy Hoffa as saying, "If the trucking industry and the railroads think we're going to sit on our hands while thousands of truck drivers are thrown out of work, they'd better think again."

Help us celebrate our 50th anniversary.

Use the free reply card inside the back cover to tell us when you celebrated your fleet's 50th anniversary . . . or when you will.

IN THIS ISSUE

The CCJ Mobile Editorial Team's "big story" on Denver-Chicago Trucking (page 99) is featured. The 16-page special package includes profitable ideas for you on management (page 100), equipment (page 104), maintenance (page 107), shop facilities (page 108), terminal operation (page 112) and safety (page 114).

But that's not all. There's a very timely report on how a western New York county fleet fights snow fast (page 115) . . . a way to speed parts cleaning (page 181) . . . the latest thinking on highways and taxes (page 188) . . . a quick look at what's ahead in vehicles and components (page 204).



Don't miss International's C-line, Ford's 152-hp gasoline engine, Divco-Wayne's "Super Cruiser" bus, P&H's "Economy" diesels, among many new products featured in this fleet shopping center (starting on page 120).



Victor Mfg. & Gasket Co., P. O. Box 1333, Chicago 90, III. . Canadian Plant: St. Thomas, Ontario

VICTOR

GASKETS • OIL SEALS • PACKINGS

The 100% Coverage Line . . . for Cars, Trucks, Tractors, Stationary Engines

Visit with Victor at the IASI Show—Booths 2908-2909

you get your Chevy fleet parts

PDQ



at your Chevrolet dealer's

Chevrolet's P. D. Q. parts distribution system (the most modern in the industry) is the reason why dealers can come across, time after time, with the Chevy replacement parts you need when you need them. Whether the job calls for an eyelet-size grommet or complete axle assembly, your dealer either has it on his shelves or he can get it to you pronto (via teletype, if necessary) from one of the 41 huge factory warehouses located all over the country. You can depend upon that, because Chevy dealers make it their business to help keep your profits up by keeping downtime at a minimum.

When you install genuine Chevrolet parts, you know you are protecting your fleet investment with high

quality parts built to perform to Chevrolet's specifications. Just as important, they are precision engineered to fit right in Chevrolet cars and trucks. That means easier, faster installation. And with all these extra advantages, dependable Chevrolet parts are reasonably priced to help keep your fleet maintenance costs down to a minimum.

Whether you operate your own service department or use outside servicing facilities, it will pay you in many important ways to use only genuine Chevrolet parts-available P. D. Q. from your local Chevrolet dealer. . . . Chevrolet Division of General Motors, Detroit 2, Mich.

CHEVROLET

P. D. Q. means Parts Delivered Quick . . . genuine Chevrolet parts, of course!





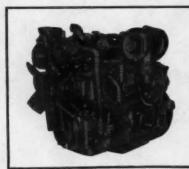
for less off-the-highway time choose

P&H DIESEL POWER

Here is the diesel engine with design and engineering features that pay off in quicker, easier servicing. Check these exclusive features of the P&H Diesel.

- Patented "Unitized" Power Assembly combines head, liner, piston, rod and water jacket in one simple unit. After thousands of running hours, you can easily remove the complete unit—and replace it with a new one—in less than an hour. No need to even drop the pan, detach manifolds or disturb engine mounts. Overhaul time is reduced from days to a few hours.
- P&H diesels have 25% fewer parts—80% interchangeability
 of parts. One adjustment of the simplified P&H fuel injection system times the entire engine. Also, P&H Diesels
 have one large valve eliminating a multiplicity of rocker
 arms, bushings, springs, push rods and cams. Fewer parts
 mean less trouble, greater interchangeability and longer life.
- P&H offers you the lightest, most compact diesel engine available. Made of lightweight aluminum construction, P&H Diesels save up to 1000 lbs. of deadweight over engines of outdated cast iron construction. This means bigger payloads and faster trips. No other engine can give you time tested and proved aluminum construction.

Choose P&H Diesels for less off-the-highway time, bigger payloads and extra profits. Contact your P&H dealer or write for P&H Automotive Diesel Bulletin Z-42.



4 cyl. PAH Model 487H-18AT rated 220 H.P. at 1800 R.P.M. weighing only 1500 lbs. or 6.82 lbs. per B.H.P. Available in 3, 4 and 6 cyl. models to meet all of your trucking needs.

HARNISCHFEGER

Diesel Engine Division-Crystal Lake, Ill.



FREE!!!FREE



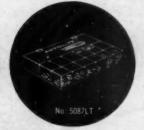


THESE TWO









WITH THESE FOUR

What four? 500 ft. of 14 gauge wire, 500 ft. of 16 gauge, 100 ft. of 7 mm. sparkplug cable, and a selection of terminals in a plastic box. The free cart at the upper left is designed to carry the wire and cable. In fact, that cart can tote 5,000 ft. of various gauges. And there's a big base plate at the bottom for the terminal box

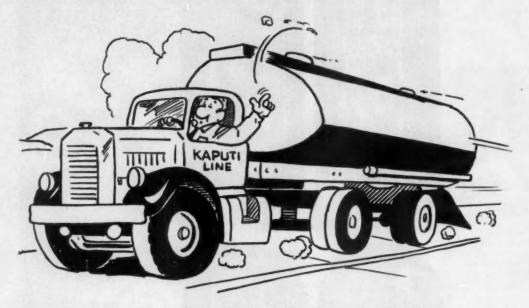
(or a battery). What's the cart on the right for? For just about anything weighing up to 150 lbs. that you don't feel like breaking your back with. Both these carts are free to both fleet owners and dealers. How can you go wrong? You get the best wire and cable and terminals made, plus

two carts that'll make your heavy days a lot lighter. Call your Autolite supplier now. AUTOLITE AN-NOUNCES the availability of Multiple #3 and #4

Conductor Cable for fleet service. A new ICC regulation, effective July 1, 1961, out-WIRE & CABLE DIVISION . TOLEDO 1, ONIO lines the need for this type of cable.

More details? Circle 153 on reply card inside back cover

COMMERCIAL CAR JOURNAL BULLETIN BOARD



Joe tossed butts at a carefree pace ...



Now we have a man in space!

Reprints available at nominal cost—for details, circle 499 on reply card inside back cover

HASTINGS OIL FILTERS Keep oil clean

AND THE PROOF IS ON THE

It's really surprising how many operators feel that *some* darkness is to be expected in oil—particularly with detergent oils. They don't realize that *any* darkness means dirt. *Any* dirt is abrasive. And abrasive means engine wear.

You can *see* this dirty oil—on the dipstick. Install a Hastings Oil Filter Cartridge. Then, on the next dipstick test, you can prove for yourself that Hastings has cleaned the oil—and kept it clean.

Depend on Hastings to keep oil clean, from filter change to filter change.* The reason is

Densite, the amazing filtering material composed of millions of pressure-packed cotton fibres that absorb dirt far beyond the capacity of ordinary filters.

Hastings pays off in longer engine life . . . better engine performance . . . fewer service requirements.

HASTINGS MANUFACTURING COMPANY - HASTINGS, MICHIGAN
Oil Filters, Piston Rings, Casite Additives, Spark Plugs

*Proved by tests conducted under supervision of Pittsburgh Testing Laboratories in accordance with U.S. Bureau of Standards. U.S. Patents 2,797,811, 2,584,771.

HASTINGS)

OFFERS A COMPLETE LINE OF OIL, AIR AND FUEL FILTER CARTRIDGES



Hastings Fire-Power Spark Plugs . . . engineered for replacement service . . . give premium performance. Write for catalog.



OS&D Clerk: "Sam, don't you know this is a new day and a new deal for the men? Why do you persist in that old-fashioned courtly manner? Why, under modern conditions, do you aiways get up for a lady standing in a bus?"

Traffic Rate Clerk: "Well, it's this way. Ever since I was a kid I've had a lot of respect for a woman with a strap in her hand."

003

Leadfoot Louie (our heavy-footed city driver) says: "In the good old days, people were said to turn over in their graves. Now they turn over in their cars first!"

001

TERMINAL MANAGER: "FILCHOCK, I WOULDN'T DO ANYTHING SO RASH AS COMMITTING SUICIDE. YOU HAVE A LOT TO BE THANKFUL FOR. NOW, FOR INSTANCE, LOOK AT FREIGHT CHECKER JENSEN ON THE SECOND SHIFT. HE JUST LOST HIS WIFE BY PNEUMONIA."

1ST SHIFT LOADER: "WELL, THAT DON'T DO ME NO GOOD. I AIN'T JENSEN!"

001

HiLo Driver: "Was your friend shocked over the sudden death of his mother-in-law?"

Freight Checker: "And how he was shocked . . . he was electrocuted!"

001

Traffic Manager's Wife: "Would you say your husband was faithful?"

Sales Manager's Wife: "I think he must be—he's had the same pretty secretary a very long time." TEACHER: "How old would a Person born in 1797 be today?"

Freight Loader's Son: "Man or woman?"

COS

Reefer Driver: "How about a date tonight?"

Diner Waitress: "I'm afraid I'm busy."

Reefer Driver: "How about a date tomorrow night?"

Diner Waitress: "I'm afraid I'M busy."

Reefer Driver: "How about —?"
Diner Waitress: "I'm afraid."

00

Excited Rate Clerk: "Tell me quick, Nurse . . . is it a boy?"

Maternity Ward Nurse: "The one in the middle is."

"Cici Jay" .



"ANY PHONE CALLS FOR ME WHILE I WAS OUT TO LUNCH?

Mrs. Smith: "I'm so miserable. My husband has been out all night and I don't know where he is."

Mrs. Jones: "Cheer up. You'd probably feel twice as bad if you knew."

COJ

FREIGHT STENO'S FATHER: "I'D BET-TER WARN YOU . . . I PUT THE LIGHTS OUT AT TEN O'CLOCK!"

FREIGHT HANDLER: "THAT'S O.K. WE'RE NOT GOING TO READ!"

001

The stenographer was transferred to the New York office of the big advertising agency. "You'll find the work the same here as in our Chicago office," her supervisor told her.

"Okay," she said, "Kiss me and let's get started."

CCI

Farm Equipment Salesman: "Boy, honey . . . you'd be a real doll if you curled your hair and put on some makeup!"

Farmer's Daughter: "Is that so? Since when does good soil need top dressing?"

ccı

The first American Astranaut to land a rocket ship on the moon stepped out cautiously. There, before him, he saw the most gorgeous blonde he had ever gazed upon. She was 12 feet tall. The Astronaut walked over to her and said:

"Take me to your ladder. I'll see your leader later."

Resume Work

COMMERCIAL CAR JOURNAL, February, 1961



Thanks to a completely new engineering approach—thanks to five years of research and continuous development—thanks to the rugged toughness of a specially-designed steel, Shuler now offers you the world's lightest-weight trailer axles, at no increase in price!

The astonishing new Shuler 20L axle is a major breakthrough in weight-saving techniques. It is the ultimate in modern design, the last possible word under existing engineering potentials. It is equal to our T-18C 20,000-lb. tubular axle which it replaces, yet it saves 50 lbs. per axle!

20L has been thoroughly proven in extensive laboratory tests and by thousands of miles of accelerated road tests.* We urge you to investigate this brilliant achievement.

SHULER AXLE COMPANY

Incorporated
2900 Second Street, LOUISVILLE 8, KENTUCKY

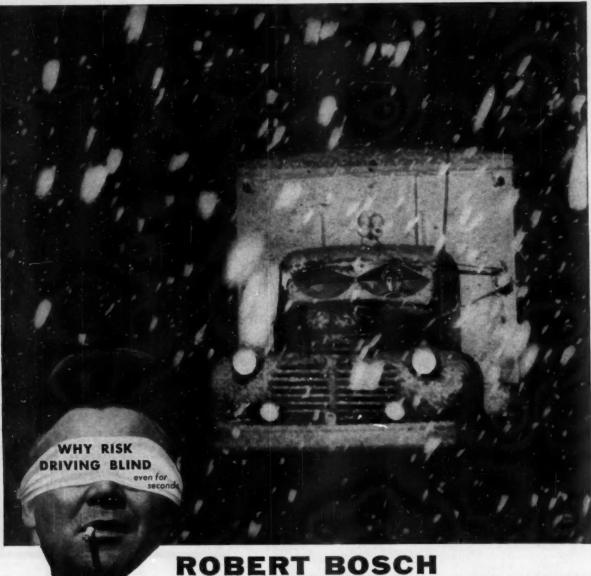


Subsidiary of Eaton Manufacturing Company

SALES OFFICES: CHICAGO, DETROIT, PHILADELPHIA, OAKLAND AND TULSA WEST COAST WAREHOUSE: Oakland, Colifornia

More details? Circle 155 on reply card inside back cover

^{*}Incidentally, the new Shuler self-contained brake has permanent oil seals on the cam-shaft, assuring full lubrication for many extra months of trouble-free operation between servicings.



ROBERT BOSCH PUTS THE POWER

in Electric Windshield Wipers that reduce the dangers of "dirty weather" driving.

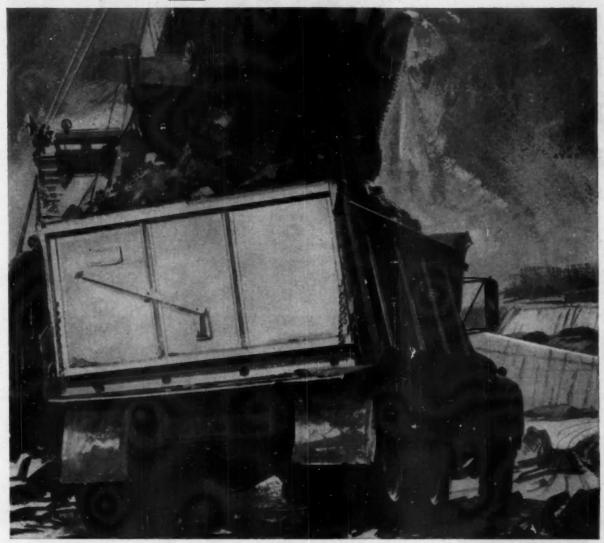
Give yourself and your drivers the extra protection of ROBERT BOSCH Electric Windshield Wipers. Dependable even in the foulest weather...Powered by a rugged ROBERT BOSCH electric motor that's independent of engine speeds. Millions in use. Won't falter even when you step hard on the gas, or climb a hill—won't stall even if your engine stalls. Play safe in "dirty weather." Install ROBERT BOSCH Electric Windshield Wipers now. They're inexpensive, easily installed.

ROBERT BOSCH CORPORATION

40-25 Crescent St., Long Island City 1, N. Y. • 225 Seventh St., San Francisco 3, Calif. ® Reg. U. S. Pot. Off. ROBERT BOSCH GMBH Stuttgart



Better products, faster, from your Bower Distributor:



Bower Roller Bearings take sudden shocks

Bower Bearings are engineered to take the impact of heavy shock loads in rough and tough off-highway service, as well as meet overthe-road fleet schedules with equal dependability.

Fleet superintendents who keep rigs rolling depend on Bower's high availability. Full stocks, readily available at nearby distributors, put equipment back in service faster. Prove it when your next job calls for bearings.



BOWER ROLLER BEARINGS

FEDERAL-MOGUL SERVICE

DIVISION OF FEDERAL-MOGUL-BOWER BEARINGS, INC. . DETROIT 13, MICH.



"American Brakeblok lining is safer, gives longer service!"

... reports Carl Konrad

Director of Maintenance
Snyder Brothers Motor Freight, Inc.
Akron, Ohio





"American Brakeblok lining is a real salesman!" says Carl Konrad, Director of Maintenance, Snyder Brothers Motor Freight, Inc., Akron, Ohio. "Its durability, long life, and elimination of brake fade are the main reasons why we have been American Brakeblok users since 1943.

"Our drivers are completely satisfied with American Brakeblok lining. When 'men of the highway' approve a lining we know it's the best! Furthermore, our service records show that American Brakeblok lining is one of our best investments."

American Brakeblok is the *quality* heavy-duty brake lining for trucks and trailers. Riveted, bonded, thick blocks. Your NAPA jobber has it . . . wherever you are!



American Brakeblok.

P. O. BOX 21 . BIRMINGHAM, MICH.

AMERICAN BRAKEBLOK

YOUR FIELD FORCE WILL BEAR UP SO MUCH BETTER-WORK MORE EFFICIENTLY,

PRODUCE MORE—WITH GM CAR
AND TRUCK AIR CONDITIONING!

Your field force will get a big lift-just naturally turn out more . . . with Harrison Air Conditioning on the job! That's why it's such a good investment for your fleet. Spring, summer and fall Harrison Air Conditioners deliver just the right temperature and humidity for peak effort from your people. Representatives do their best because they look and feel their best when they make their calls in the clean, healthier atmosphere of Harrison Air-Conditioned GM cars and trucks. And your company prestige goes up because your representatives' good appearance gives a better impression. Whether you have already purchased or are about to buy your new Cadillacs, Buicks, Oldsmobiles, Pontiacs, or Chevrolets*, see your GM Dealer for Harrison Air Conditioning -a reliable General Motors product. *Harrison Air Conditioning is also available on most 1961 Chevrolet trucks.

SEE YOUR GENERAL MOTORS DEALER FOR AN AIR CONDITIONED DEMONSTRATION

GM cool air by the carload [TARRISON]

AUTOMOTIVE AIR CONDITIONING

. COMPRESSOR BY FRIGIDAIRE

HARRISON RADIATOR DIVISION, GENERAL MOTORS CORPORATION, LOCKPORT, NEW YORK AUTOMOTIVE RADIATORS • OIL COOLERS • THERMOSTATS • AIR CONDITIONERS • HEATERS • DEFROSTERS

COMMERCIAL CAR JOURNAL, February, 1961

More details? Circle 159 on reply card inside back cover



Your Cargo's Safer In Containers Built Of Parish Steel Components!

This cargo container featuring high-strength Parish steel components is one of 1,500 built by Highway Trailer Company for the Grace Line for interchangeable sea, rail, and overthe-road transportation.

Re-useable containers built of Parish steel components keep your cargo sealed and protected against weather and pilfering. They last indefinitely, require little maintenance, guard against corrosion and the possibility of fire.

Parish high-quality steel components are precision-produced in large volume, pre-punched to allow assembling by the new Universal Fastener System which speeds construction and reduces container cost to you.

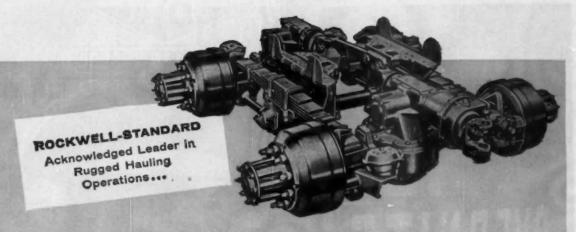
Parish engineers will work directly with you or your container fabricator in the designing of containers to meet your specific requirements. The next time you're in the market for containers . . . call on them for assistance.



In grueling stacking tests, this container, fabricated of mighty Parish steel components, withstood loads in excess of 120 tons!

PARISH PRESSED STEEL

DIVISION OF DANA CORPORATION . READING, PENNSYLVANIA



Here's why Timken-Detroit®

DOUBLE-REDUCTION TANDEMS LEAD IN TOP PERFORMANCE-LONG LIFE!

Timken-Detroit Heavy-Duty Tandems with Hypoid Helical Double-Reduction Gears are the big favorites for top performance and long life. Here are some of the reasons why:

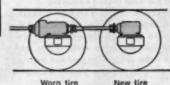
Rugged Hypoid-Helical **Double-Reduction Gearing!**

Balanced gearing-with two full-sized gear sets working in series to take an equal share of the load-provides a stronger power train with balanced gear set loadings and the widest range of ratios.



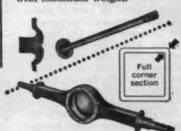
Driver Controlled Interaxle Differential!

Allows differential action between the axles to compensate for worn or mismatched tires. Both axles do equal amounts of work . . . can be disengaged at any speed, giving positive through drive when better traction is needed. Straight-Line Through Drive eliminates prop shaft angularity . . . increases bearing and gear life, reduces maintenance.



"Torsion-Flow" Axle Shafts and Hot-Forged Housings!

More splines, Torsion-Flowforging, and patented heattreating processes make Rockwell-Standard shafts the toughest in the industry. Housings are hot-forged from high carbon steel, and are rectangular shaped with full strength corners for greatest strength with minimum weight.



Timken-Detroit Double-Reduction Tandems come in a wide range of capacities-6 models from 34,000 to 65,000 pounds.

Another Product of ... ROCKWELL-STANDARD

CORPORATION Transmission and Axle Division, Detroit 32, Michigan



Overnite Transportation Co. Inc. reports...

"Timken* bearings still good after 200,000 miles-one reason we use no other bearing"

WHEN once more they pulled the wheel above as part of their preventive maintenance program, Overnite Transportation Co. Inc. of Richmond, Virginia found the Timken® bearing in perfect condition—even though it had rolled over 200,000 miles. J. T. Howell, Overnite's Maintenance Supervisor, puts it this way, "We operate the largest fleet in Virginia and we've got to be dependable. That's one reason we use only Timken bearings." Overnite depends on this kind of bearing

performance to stick to their tight schedules hauling freight through Virginia, North and South Carolina, Georgia and into Tennessee.

Overnite buys Timken bearings like thousands of cost-conscious fleet owners do—on price. Not initial price, but price per mile. They know it isn't the price you pay for bearings that counts, it's the performance you get.

Timken bearings perform dependably because we guard their quality from first to final production step. They are precision made from the finest bearing quality alloy steel available. And we know steel—we've been in the steel-making business for years.

So when you need replacement bearings, do what most truck manufacturers do: Specify Timken tapered roller bearings. To get the most from your Timken bearings, send for free booklet, "Fleet Owners Service Manual". The Timken Roller Bearing Company, Canton 6, Ohio. Cable: "TIMROSCO". Canadian Division: Canadian Timken, St. Thomas, Ont.

Lowest price per mile...
mile after mile after mile

TIMKEN tapered roller bearings



WORLD BESTOS RED BLOCK

FIRST and STILL THE ONLY

heavy duty brake block combination that gives you

- 1 NO-FADE (HEAT OR WATER)
- 2 LONGER LINING LIFE
- 3 LONGER DRUM LIFE
- **GREATER BRAKE SAFETY**
- 6 LOWER COST PER MILE

proved conclusively by a

12 YEAR RECORD of UNSURPASSED PERFORMAN



10 YEARS PROVES COMPLETE DEPENDABILITY OF RED

BLOCK "The handling of explosives is a large part of our business and the hazards involved demand a high reliability factor. Our experience in using WORLD BESTOS RED BLOCK on all of our units for a period of 10 years has established the long life and dependability of this brake block under all types of driving conditions."

Constructors Transport Co., Los Angeles, California



SAFER BRAKES AND LESS DRUM WEAR

"We have used World Bestos brake blocks for nearly 15 years and our fine safety record shows how right we have been in this choice. Our drivers are never troubled by fading brakes and our drum replacement costs are consistently low."

Hennis Freight Lines, Inc., Winston-Salem, North Carolina



ONLY RED BLOCK MEETS DEMANDS

"Although, periodically, we test blocks of other manufacturers we have found that only RED BLOCK meets our exacting demands of peak performance, long-range mileage and minimum checking of brake drums.

We travel 175 tractors and trailers on a tight schedule and RED BLOCK assures less down time."

Frozen Food Express, Dallas, Texas



12 YEARS PROOF OF NON-FADE AND LONG

LIFE—"We have been using World Bestos RED BLOCK for a period of 12 years. We are completely satisfied and enthused with the characteristics of RED BLOCK. We have experienced no fade and are more than satisfied with the long life built into this line. Our fleet owes its brake efficiency to WORLD BESTOS RED BLOCK."

Imperial Truck Line, Los Angeles



RED BLOCK CONTRIBUTES TO OUTSTANDING

SAFETY RECORD—This entire fleet of 155 refrigerated trucks and 64 regular trucks has used WORLD BESTOS RED BLOCK COMBINATION brake blocks since 1952. Never, during this time, have they had an accident due to brake failure.

This is another of the many outstanding safety records by users of WORLD BESTOS RED BLOCK.

Alterman Transport, Florida



WORLD BESTOS

RED BLOCK

the only NO-FADE (MATER) BRAKE BLOCK COMBINATION

aives

BETTER, SAFER BRAKES AT LOWER COST PER MILE!

That's why more and more fleets and brake specialists are changing to RED BLOCK for all heavy duty equipment.

Best Today ... Still Better

Tomorrow—The RED BLOCK COMBINA-TION you use today is the most thoroughly tested and proven friction material ever offered for heavy duty service. It's an exclusive dry-mix formulation engineered to withstand severe operating conditions. An unsurpassed 12-year record of consistently superior performance is your assurance that the WORLD BESTOS RED BLOCK COMBINATION lives up to the promise of best today—still better tomorrow.



40% MORE MILEAGE, GREATER SAFETY

"We haul explosives over all types of terrain in ten Western states and can not afford to gamble with brakes. RED BLOCK insures dependable braking and gives us up to 40% more mileage between relines."

Bee Truck Line Dispatch, Inc., Berkeley, California



RED BLOCK CUTS MAINTENANCE COSTS

"We have been using World Bestos RED BLOCK for the past eight years in our logging operation. We can report a saving on maintenance cost due to longer lining life and reduced drum wear."

Deer Park Pine Industry, Deer Park, Washington



10 YEARS OF TROUBLE-FREE BRAKING

"With the World Bestos RED BLOCK Combination, we have enjoyed ten years of trouble-free brake maintenance. Long drum life, long lining life and dependable stopping power make 'Big Red' our number-one choice for our fleet of some 200 units."

The Guyott Company, New Haven, Connecticut



RED BLOCK OUT-PERFORMS COMPETITIVE

BRANDS "We have used WORLD BESTOS RED BLOCK LINING since 1958 and have tested it against other competitive brands. Our savings have not only been in longer mileage but drum replacements are now almost nil."

Global Van Lines, Inc., Los Angeles, California



RED BLOCK GIVES LONG. FADE-FREE

MILEAGE "We have been using the World Bestos RED BLOCK Combination for about five years on our fleet of 371 tractors and 546 trailers. We find that it gives fade-free performance, good mileage and negligible drum wear."

Carolina Freight Carriers Corporation, Cherryville, North Carolina



RED BLOCK SUPERIOR TO METAL BLOCKS

"We have found RED BLOCK "J" and "JJ" Combination Sets very effective in severe service such as logging and heavy construction. One of our logging ac-

counts ran comparative tests with metal block. They found service life and lack of drum wear with DOUBLE RED BLOCK considerably superior to the results obtained with metal blocks. In addition, the no-fade characteristics of RED BLOCK eliminated drivers' complaints."

VERN GRAFFT, General Manager Industrial Parts Depot, Inc., Oakland, California

Experience Proves Superiority

12 years' service on all types of fleets...in all parts of the country...under the most severe road and load conditions...prove conclusively that the World Bestos RED BLOCK COMBINATION delivers reliable, no-fade performance and substantial dollar savings.

Brake specialists select RED BLOCK because of its enthusiastic trade acceptance and intense user loyalty . . . because no other brake block can match it for safety, savings and all-around satisfaction.

Prove it Yourself

Remember . . . there is only one true brake block combination . . . the WORLD BESTOS RED BLOCK COMBINATION. See back page for information on how it works and why it saves money . . . then buy RED BLOCK COMBINATION. Prove for yourself that RED BLOCK delivers safer, more reliable brakes . . . at lower cost per mile . . . than any other blocks you have used.



DRUM COSTS DOWN 60%

"Experience has proved that RED BLOCK provides safer, non-fading brakes that are cooler running and easier on drums. In fact, we have seen drum replacement costs reduced as much as 60% by fleets that have changed to the World Bestos RED BLOCK Combination."

A. H. Ross and Company, Los Angeles, California



TESTS PROVE RED BLOCK BEST

"... RED BLOCK was thoroughly tested by P-I-E Engineering Department. It was specified for new units because tests prove it stops loads safely . . . lasts longer and requires fewer drum replacements."

Pacific Intermountain Express, Oakland, California



4 YEARS' USE PROVES NO FADE, LOWER BRAKE COST

"We have been using World Bestos RED BLOCK for the past four years and find that it lives up to everything you claim for it."

C. A. Terpening Trucking Co., Inc., Syracuse, New York





"So far as we can discover, World Bestos RED BLOCK is the only brake block that can deliver constant, high-friction stopping power regardless of the intense heat and abuse of day-in-and-day-out heavy duty service."

Air Brakes & Centrols, Baltimore, Maryland

Elektron ...

NO BRAKE FADE,

"Even on extremely steep grades we have never had a brake fadeout and have never broken a drum. We recommend RED BLOCK highly, regardless of operating conditions."

Hall Heavy Hauling Co., Eugene, Oregon

RED BLOCK LOWERS BRAKE COSTS



"We travel 39 heavily populated states with rugged terrain that puts our equipment to severe tests. Brakes were a problem until two years ago when we started using RED BLOCK COMBINATION. Since then our brake lining costs have been lowered—even more important is the increased safety factor of the non-fade RED BLOCK COMBINATION."

Transcold Express, Dallas, Texas



NO-FADE (WATER)

BRAKE BLOCK COMBINATION

Here's how the RED BLOCK COMBINATION stops brake fade, gives more mileage and longer drum life

stops brake fade—RED BLOCK dry-mix friction formula is entirely different from that of any other brake block on the market. It performs efficiently at extremely high temperatures, is not affected by glaze or water film and gives drums a smooth finish that provides a perfect braking surface at all times. As a result, RED BLOCK never loses its friction characteristics . . . it can't fade!

STOPS HEAT CHECKING—Continuous, highpressure braking produces abnormal stresses in overheated brake drums, causing distortion and cracking known as "heat checking." Heat checking ruins drums and linings and is a major expense in heavy duty truck maintenance. The RED BLOCK COMBINATION gives dependable stopping power with considerably less brake pressure. Less severe braking gives the drums more cooling-off time . . . reduces danger of checking . . . greatly prolongs drum life.

USED ONLY IN COMBINATION—Only one RED BLOCK segment is usually needed for each wheel. Two RED segments are used when service conditions are exceptionally severe. The other segments ("D" Blocks) supply the correct functional characteristics to smooth braking action which, in turn, increases stability and lining life. Thus, the RED BLOCK COMBINATION gives reliable, fade-free braking at all times . . . plus longer service between relines.

Highest Quality
STANDARD-DUTY BRAKE BLOCKS



Available in a variety of frictions and combinations to cover normal service needs of all trucks, trailers and buses using blocks of ½ thickness and over. They give consistently good mileage, excellent fade resistance and crisp, dependable braking action in average to moderately severe service.

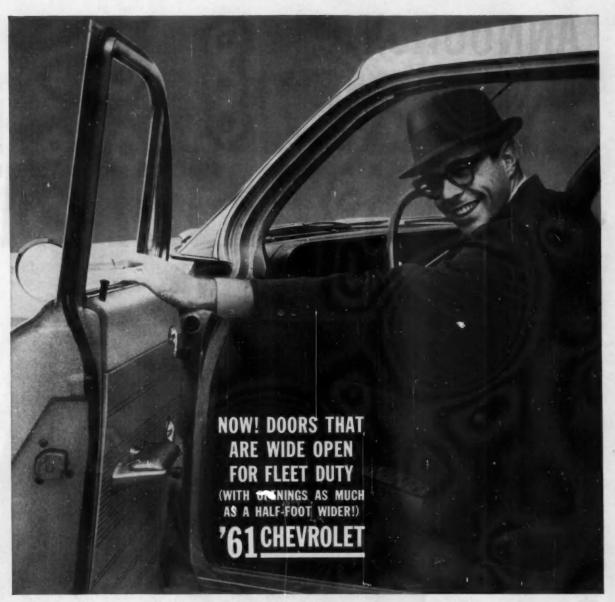
for light and medium trucks use
World Bestos "PFT" (Prescribed Friction Truck)



Engineered specifically for trucks and buses up to and including 2½ tons. Dry-mix, rigid-molded "PFT" is an exceptionally tough, durable lining that's built to withstand abuse and give long, dependable service. Available in both Bonded Shoe Sets and in packaged segments for riveting.

See your WORLD BESTOS Distributor or write direct to WORLD BESTOS, New Castle, Indiana for complete information, catalog and price lists ...

WORLD BESTOS NEW CASTLE, INDIANA





■ Here's the car that measures up to your fleet needs like no other. Everywhere you look—from those wider, easier-to-get-into door openings to the cavernous new deep-well trunk—you'll find wide-open spaces where you want them. We've even raised the seats and increased the front seat leg room to give you the kind of easy-going comfort that takes fatigue out of long business trips. But with all this extra roominess, Chevrolet's sensible new outside dimensions allow extra inches of

clearance for easier parking and garaging. These are just a few of Chevrolet's important new improvements in functional design which further assure you the high trade-in Chevy has always been so famous for. Get in touch with your dealer soon and let him show you all the made-to-order fleet car benefits that make Chevrolet your best investment for economical transportation. . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

The fleet car America likes to do business with!



COMMERCIAL CAR JOURNAL, February, 1961

More details? Circle 100 on reply card inside back cover

ANNOUNCING!

ALL-NEW FIRESTONE THE TRUCK TIRE THAT

NEW

flatter crown means equal pressure throughout tread print for extra load-hauling efficiency, extra mileage.

NEW

inner-rib bladed tread increases traction, lateral stability. Positive steering on curves—wet or dry!

NEW

"stone guards" built right into the tread keep it free of gravel and pebbles to increase truck tire life.



TRANSPORT-100, INCREASES MILEAGE 50% AND MORE

up to 30% deeper grooves, buttressed for strength; longer-lasting traction-tread on any wheel position.

efficient tread design:
broad center rib equalizes load distribution, reduces slippage, increases mileage.

Proved in 100 million miles of fleet tests to bring you 50% more original-tread mileage and much greater drive-wheel traction than any other regular original equipment Firestone truck tire! The all-new, all-wheel position Transport-100 wears far longer—actually gives you faster starts and quicker stops when half-worn than other original equipment truck tires when new. And, it's the first truck tire anywhere truly noise-treated for quieter running. Yet it costs no more! In Nylon or Tyrex* rayon cord, tubeless or tubed. See it at your Firestone Dealer or Store!

Built to give extra mileage on any wheel position and exceptional performance on drive wheels, this all-new Firestone Transport-100 gives you 50% more mileage before recapping. Made possible by (1) five years' research; (2) a new and phenomenally torque-toughened Firestone Rubber-X compound—runs more than 10° cooler; (3) 100 million total tire test miles including 3½ million

miles of "torture test" driving, the Transport-100's revolutionary new tread also increases traction beyond any previous truck tire. Even at its half-worn point, the Transport-100 still delivers more drive-wheel traction than other tires WHEN NEW. See the all-new Transport-100! It's the newest addition to the famous line of ever-tougher Firestone truck tires.

Copyright 1961, The Firestone Tire & Rubber Company



®T. M. of Tyrex, Inc.

Member of THE ATA FOUNDATION of THE AMERICAN TRUCKING INDUSTRY

Tune in Eyewitness to History every Friday evening, CBS Television Network



"TURNPIKES ARE MURDER ON ENGINE BEARINGS"

There's a big difference in engine bearings—a difference that can save you costly delays and repairs. Michigan Engine Bearings are engineered with *Turnpike Toughness*: the durability to stand up under the most gruelling, long, high-speed hauls.

All materials for Michigan Bearings are specially chosen and carefully protecto-treated for maximum fatigue strength, high thermal conductivity, corrosion and oxidation resistance, superior embeddability and surface action. They are machined to

tolerances as close as .000125 plus or minus, assuring perfect fit at every point.

Michigan Engine Bearings for replacement are made by Detroit Aluminum and Brass Corporation—for over 35 years a principal supplier of original equipment bearings for leading automobiles, trucks, buses, and farm equipment.

Insist on "Turnpike Tough" Michigan Engine Bearings for all your replacements. They're made to stay on the job!

Michigan ENGINE BEARINGS

made by

DETROIT ALUMINUM AND BRASS CORPORATION, Detroit 11, Michigan



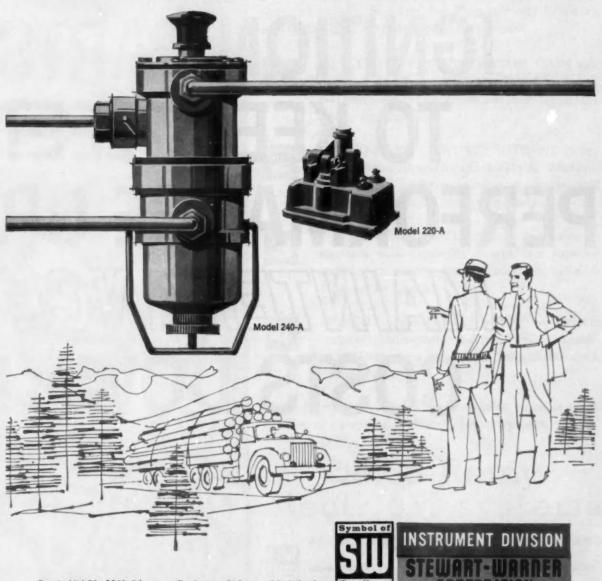
Rugged Stewart-Warner Electric Fuel Pumps operate independently of the engine. In severest winter weather they feed fuel swiftly and smoothly, assuring quick starts. On scorching summer days they eliminate vapor lock by forcing vapor from the fuel line so there's no chance of engine stalling or stopping. In any weather they give you smooth, even engine operation.

The precision-made Model 240-A features an automatic pressure regulator so there's no flooding, no surging. It automatically maintains desired pressure at carburetor from 1 psi to 8 psi and delivers up to 60

gallons per hour. A built-in fuel filter traps impurities and the entire unit is designed for easy field service by your own personnel.

The popular Model 220 is ideal where delivery requirements do not exceed 20 gallons per hour and pressure requirements are not critical. Efficient, dependable, trouble-free. Stewart-Warner Electric Fuel Pumps are available for 6 and 12 volt systems, for any gasoline engine. Contact your local Stewart-Warner supplier for additional information . . . and the correct Stewart-Warner Electric Fuel Pump for your needs.

For quicker starts...super performance STEWART-WARNER ELECTRIC FUEL PUMPS!



Dept. UU-21, 1840 Diversey Parkway, Chicago 14, Illinois

INSTALL DELCO-REMY
IGNITION PARTS
TO KEEP FLEET
PERFORMANCE UP,
MAINTENANCE
COSTS DOWN!



Properly functioning ignition systems in your fleet vehicles can do a lot to cut down-time and keep fleet operations profitable. Regularly scheduled inspections of units can stop emergencies before they start. The distributor, for example, is one of the most important units in the ignition system. Preventive maintenance procedures that regularly search for and replace worn ignition components help insure the dependability of the fleet operation.

For dependable service replace with reliable Delco-Remy parts. They are the *quality* ignition service parts designed for hard working fleet vehicles. They're ready to install and make ignition systems perform like new.

- DELCO-REMY DISTRIBUTOR CAPS are designed and built of highly dielectric, shock and heat resistant materials, and feature voltage-saving internal ribs.
- DELCO-REMY CONTACT SETS are factoryadjusted and aligned for quick, easy installation. Heat-sealed, moisture-proof packages protect contact sets against dirt and oxidation.
- DELCO-REMY ROTORS combine maximum strength with minimum weight and superior balance to assure smooth rotation at slow or turnpike speeds.
- DELCO-REMY CONDENSERS assure correct electrical capacity and resist voltage breakdown. Hermetic seal keeps out harmful moisture, oil, and vapors.

Delco-Remy electrical parts are available at car or truck dealers, or through the United Motors System.

Delco-Remy electrical systems



FROM THE HIGHWAY TO THE STARS

DELCO-REMY . DIVISION OF GENERAL MOTORS . ANDERSON, INDIANA

Save on multi-stop routes with 1961 FORD ECONOLINE VAN

SAVE AS MUCH AS \$433 ON PRICE*... AND GET UP TO 39% MORE LOADSPACE

You wouldn't know it from the way it looks, loads or hauls, but this revolutionary van is America's lowest-priced* van. It's actually priced \$308 below the other American cabforward economy van and as much as \$433 below conventional ½-ton panels. But that's just the beginning! You get lively performance and proven gas economy with the popular Falcon Six. This modern engine goes 4,000 miles between oil changes; has an aluminized muffler which lasts up to three times longer than ordinary mufflers.

And you can save more because there's up to 39% more loadspace than in ½-ton panel models—a huge 204.4 cubic feet! The cargo floor is flat with no rear engine hump or steps. And advanced, functional design cuts dead weight . . . makes possible the tremendous

cargo area in a short 168.4-inch over-all length. The 90-inch wheelbase provides outstanding maneuverability for easy handling in congested traffic and quick parking. Large double doors, both rear and curbside, provide a loading width of 49.4 inches (47.8 inches in height) for excellent rear and curbside load accessibility.

And you can save on maintenance expense, too. The engine cover can be lifted quickly, exposing the entire engine for rapid service. Spark plugs, distributor, etc., are conveniently located to speed engine tune-ups. And many major repairs can be made without ever removing the engine. Single-unit van design gives a tight, sound, all-steel body that protects your loads in fine style. In addition all main underbody structural members are heavily zinccoated to resist rust and corrosion.

*Based on a comparison of latest available manufacturers' suggested retail delivered prices



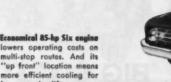


Direct-acting, telescopic shock absorbers are sto ard front and rear for a softer ride

The smart, new Falcon Sedan Delivery is priced * as much as \$300 below conventional ½ -ton panels. And you save with low "Falcon" operating costs in a vehicle that provides a big 76.2 cubic feet of loadspace. It's a real beauty for delivery service.

Convenient steering column shift lever controls 3-speed Synchro-Silent transmission for easy manual operation

longer engine life





I-Beam front exte and long leaf springs provide a comfortable ride and reduce tire wear. Front tires can last up to twice as long, compared to tires on independent-type suspensions





SAVE WITH LESS MAINTENANCE EXPENSE

Maximum engine accessibility cuts maintenance costs. The engine cover can be quickly lifted, exposing the engine for more rapid service. Even major repairs can be made without removing the engine.

SAVE WITH **FALCON SIX ECONOMY**

You get proven economy and lively performance with this famous 85-hp Economy Six. And its up-front location means better engine cooling and better vehicle performance. 4,000 miles between oil changes.

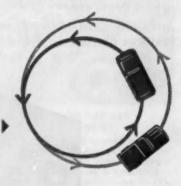
SAVE WITH **GALVANIZED PROTECTION**

The Econoline Van is well protected against rust and corrosion for longer body life. All main underbody structural members are heavily zinc-coated to resist rust, for greater durability and less maintenance.



UP TO 39% MORE LOADSPACE than in conventional ½-ton panels. Your cargo rides high, wide and handsome in the Econoline Van. The load area is over 54 inches high and 65 inches wide (over 4 feet between the wheelhousings). The length is 89.3 inches from rear of engine compartment to the rear door (106 inches from rear of seat and 143 inches from firewall). Total loadspace is a big 204.4 cubic feet!

BETTER MANEUVERABILITY with cab-forward design and short 90-inch wheelbase. The Econoline Van has the shortest turning diameter of any comparable vehicle! It's 13% shorter than other cab-forward economy vehicles and up to 18% shorter than conventional 1/2-ton panels!



NEWS OF MORE SAVINGS FOR CITY DELIVERY OPERATORS

Save on city delivery and shuttle costs with '61 FORD TRUCKS

NEW 262-CU. IN. "BIG SIX" FOR GREATER TWO-TON PERFORMANCE AND ECONOMY

America's savingest two-ton "city peddle" trucks now offer a big 262-cu. in. Six with the power of big displacement, the gas economy of 6-cylinder design, plus the durability of heavy-duty construction. This engine features a sturdy stress-relieved head and block, strong forged steel crankshaft, long-lasting, stellite-faced intake and exhaust valves and durable, pyramid-type connecting rods. Ford's proven 292 V-8 and 292 Heavy Duty V-8—the V-8's with "six-like" economy—are also available for your special power requirements.

And you save with other new durability features like the more rugged frame, stronger

radiator construction, improved cab and chassis electrical wiring, better rear brakes for longer lining life, plus longer, easier-riding and more durable rear springs.

You save more... because you can carry more every trip! Functional chassis construction provides maximum strength with minimum weight for top payloads. Ford's tilt-cab design distributes more weight to the set-back front axle to increase payloads by as much as 1,000 pounds. And parallel ladder-type frame with 34-inch width—standard on all Ford models—allows you to install special-purpose bodies more easily and at less cost.

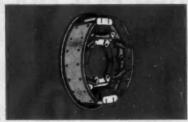






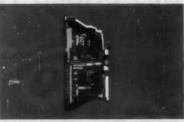
SAVE UP TO \$150 ON FRONT TIRES

In certified tests Ford front tires lasted up to twice as long. In 50,000 miles, savings can add up to \$150 on a pickup . . . more on 2-tonners. Ford's sturdy I-Beam front axle and leaf-spring suspension also cut maintenance costs.



SAVE WITH 39% LONGER BRAKE LINING LIFE

The Ford F-600's improved rear brakes have a more positive retracting spring that completely disengages linings from drums for longer brake lining life. In certified tests by independent experts, rear brake linings lasted 39% longer.



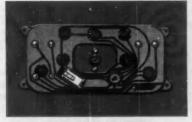
SAVE WITH HEAVY-DUTY 111/2-INCH CLUTCH

A big HD 11½-inch clutch is now available with Ford's 292 and 292 HD V-8's for increased durability. Its large 140.8-square inch lining area dissipates heat faster for longer clutch life and greater dependability.



SAVE WITH POSITIVE CRANKCASE VENTILATION

Ford's Positive Crankcase Ventilation system cuts engine corrosion and oil contamination for greater engine durability and extended oil life. It's standard on the new 262-cu. in. "Big Six."



SAVE WITH PRINTED ELECTRICAL CIRCUITS

Ford's printed wiring circuit is standard on all Tilt Cab models. This system, designed for long life, eliminates the "under dash" tangle of wires, minimizes shorts and is easy to repair.



SAVE WITH TILT CAB ACCESSIBILITY

Ford C-Series cabs are quick and easy to tilt forward to expose the engine for inspection and service. Because you get such complete engine accessibility maintenance and downtime can be cut.

NEWS OF MORE SAVINGS FOR OVER-THE-ROAD HAULERS . . . >

Save on the long hauls with new '61 FORD TRUCKS

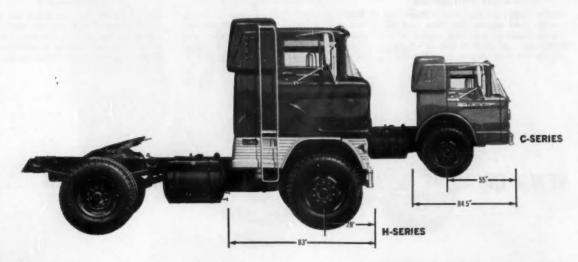
BIG SUPER DUTIES CUT OPERATING COSTS, GIVE PROVEN DURABILITY THAT'S BACKED BY A 100,000-MILE ENGINE WARRANTY

The 100,000-mile warranty on Super Duty V-8 gas engines is the most liberal in the industry. On 401-, 477- and 534-cu. in. V-8's, Ford Dealers will replace any major engine part (including block, heads, crankshaft, bearings, valves, pistons, rings) found to be defective in materials and workmanship providing trucks are used in normal service. Warranty covers full cost of replacement parts for 100,000 miles or 24 months, whichever occurs first . . . full labor costs for first year or 50,000 miles, sliding percentage scale thereafter. Never before have you had such protection . . . such evidence of long-term durability!

You save with greater gas economy! Certified tests prove the 1961 Ford Trucks with Super Duty V-8's give up to 20% better mileage. And Ford's new lightweight extra-hi-tensile single-channel frames (standard F- and H-Series) give you long-lived

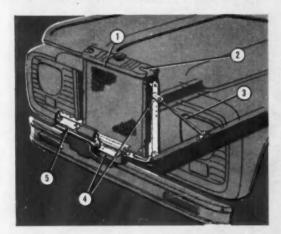
durability combined with a lightness of weight for added payloads. In addition, you get a wide choice of industry-accepted power train components in a "maintenance-engineered" chassis for easier service and lower running costs.

Save with the tractor best-suited to your job! Ford Super Duty V-8's are available in three basic tractor series to give you the particular type of cab and BBC dimension needed to comply with your legal load and road requirements. The F-Series models offer a conventional cab with 102" BBC and 28" BA dimensions for maximum loading in "bridge formula" states. The C-Series models with 82" BBC dimension and set-back front axle let you haul top payloads where axle loads are the deciding factor. The new H-Series features 82" BBC (83" with sleeper cab) and 28" BA dimensions in tilt-cab models for GCW's up to 76,800 pounds.

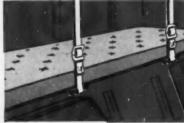




SAVE WITH NEW HEAVY-DUTY CONSTRUCTION THAT DOUBLES CAB, SHEET METAL AND RADIATOR LIFE



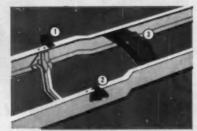
- 1 Ford's exclusive "lock-seam" radiator construction doubles the solder area at key seams for greatly increased strength and longer radiator life.
- 42% heavier-gauge sheet metal in fenders, hood, cab floor pan and toeboard gives greater strength and durability. Heavier-gauge metal on radiator tanks and header provides more strength, greater resistance to vibration, jolts and corrosion.
- 3 Independent radiator mountings, separate from front end sheet metal, mean that road shocks and shakes are not transmitted to the radiator through sheet metal. Tanks, tubes and connections last longer, require less maintenance.
- "Horse collar" mounting, seated on resilient rubber at the center of frame cross member, soaks up any frame flexing . . . cuts wear and tear on entire cooling system.
- Fender mountings, independent of both cab and radiator, eliminate stress transfers for greatly increased fender life. And only 8 bolts per fender allow easy removal for rapid service accessibility to engine area.



Save with new sleeper cab that adds only 25 pounds to regular cab weight. This fiberglass compartment, for C-and H-Series models, meets all ICC requirements and adds only one inch to the standard BBC dimension of the H-Series models and 2½ inches for the C-Series.



Save with Super Duty V-8's, now in their fourth year of production. Displacements range from 401 to 534 cubic inches with horsepower from 206 to 266. Both the gasoline economy and the durability of these engines have been greatly improved for 1961.



Save with new 3-point cab mounting system for greater cab durability. Two outboard front mounts plus a centered "twin" rear mount provide a triangular system that holds the cab stationary while allowing the frame to move independently...reducing strain on the cab.

FORD TRUCKS COST LESS

YOUR FORD DEALER'S "CERTIFIED ECONOMY BOOK" PROVES IT FOR SURE...



6-VANE air motor

Compare a smooth-operating "six" with a "four" and you'll see the advantages of Ingersoll-Rand's 6-Vane air motor design. You get greater power, smoother operation and higher starting torque . . . all red . ball extras that assure you top efficiency and long, trouble-free life.

IMPACTOOL Size 434, 1" Drive

another red

ball extra

clusive) controls power. Air-balanced throttle valve provides full power range with smooth and complete control.

Easy-Out Replaceable Bushing. You don't have to buy a new hammer case when you want to replace the bushing on an I-R Impactool.

Built-In Air Control. Adjustable trigger stop (an I-R ex-

"2-Pack" Construction. Either the impact mechanism "pack" or the motor "pack" can be serviced individually without disturbing the other.

"Watchmaker" Accuracy. "Area" seal (rather than "line" seal) means all air entering an I-R tool is used to generate power.

Electronic Precision. Special electronic equipment double-checks machined parts for perfect mating of all surfaces and bores.

best design-biggest line look for the red ball extras

Ingersoll-R



"We doubled our average mileage with

LIPE CLUTCHES"

"In our type of operation, our 90 buses average 28 to 30 stops per hour picking up children in traffic," says R. H. Paradise, president of Schoolway Transportation, Hales Corners, Wisconsin.

"Our average clutch life under this type of operation has been 20,000 miles. Our first Lipe Clutch was pulled at 39,000 miles — almost double our fleet average."

Like fleets of all types, Schoolway is interested in fundamental cost and performance: Unit cost. Reliability. Number of engagements between teardowns. Total mileage. Cost of labor and replacement. Loss of equipment use.

To these basic considerations Lipe Clutches give the answers: Longer equipment use. More engagements between teardowns. More total mileage. Lower average cost per mile.

These answers show up in fleet cost-analyses everywhere. They tell why, the Country over . . .

the trend is to LIPE!



There is a Lipe Clutch to meet requirements of vehicles 18,000 lbs. G.V.W. and up; for torque capacities from 200 to 3000 ft. lbs. For application assistance and specific data, contact the Company direct.



E & L TRANSPORT CO. drivers prefer Unison-Action Seats above all other seats

E & L Transport Co. has terminals in Dearborn and Novi, Michigan, and in Louisville, Kentucky.



Edward J. Petricko Driver for E & L Transport Co.



"Unison-Action Seats greatest invention ever thought of to help truck drivers" says Edward J. Petricko

"I really believe the Unison-Action Seat, with its full-floating back, is the greatest invention ever thought of to help truck drivers. Before the company bought Unison-Action Seats three years ago, I suffered severe pains from driving. In less than a month after switching to Unison-Action Seats, the pains disappeared like a miracle. In the past three years, I have driven approximately 250,000 comfortable and relaxing miles on Unison-Action Seats."

full adjustability— a flick of the finger tilts the floating back to any comfortable position, even while truck is in motion.

they're more than good they're the best for any truck

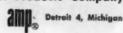




scientific contouring — Unison-Action's fullfloating back is contoured to fit ANY driver. It's the floating action of the back that makes full contouring so successful in Unison-Action Seats.

UNISON-ACTION SEAT DIV. American Metal Products Company

5991 Linsdale Ave.



More details? Circle 108 on reply card inside back cover

Better products, faster, from your Federal-Mogul jobber:



Federal-Mogul Engine Bearings for on-time schedules

They stretch overhaul intervals. Restore like-new power...assure dependable performance.

Whatever the type or size you need, Federal-Mogul has the right engine bearing for your fleet. That's why fleet owners and mechanics prefer them 2 to 1.

Federal-Mogul sintered engine bearings are made by an exclusive patented process in five layers for extralong service life under the most rugged conditions. *Plus* features give strength and bond, lining stability, smoother "break-in", and corrosion resistance.

Get the best bearings that money can buy to put your rigs back on the road faster and keep them there longer. Your nearby jobber will always give you fast delivery. Call him today.

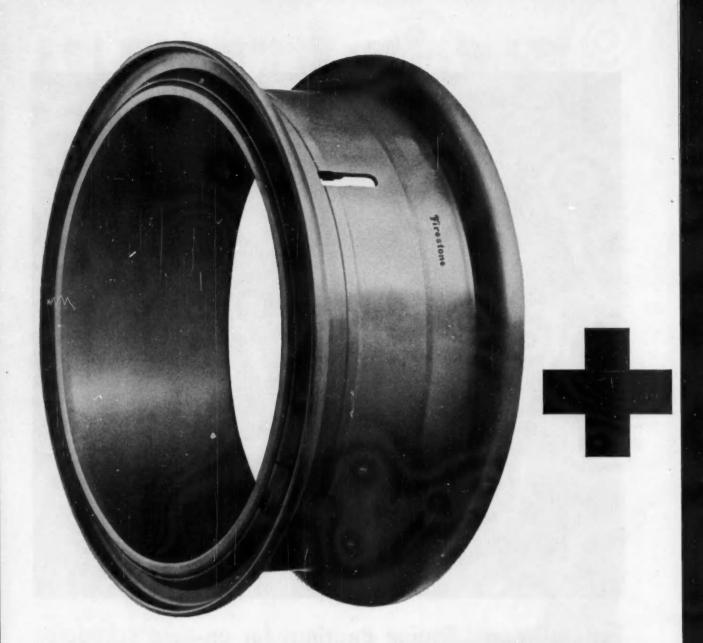


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DIVISION OF FEDERAL-MOGUL-BOWER BEARINGS, INC. . DETROIT 13, MICHIGAN





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Firestone builds rims and wheels for every truck, trailer and bus on the road! This means you can always specify Firestone quality, backed by 52 years of leadership in design and manufacturing and billions of successful performance miles all over the world. It means you get longer-lasting service and greater payload potentials in the only complete line of rims and wheels on the market. And, when you buy for replacement or for new equipment, you can specify Firestone at no extra cost! Rims of rivetless Accu-Ride® Wheels are exclusively Thruwelded to discs for doubled strength. Spinformed discs give them improved dimensional control with perfect balance to reduce tire-wearing wobble and hop. Precision-Correct Rims roll truer, take more high-speed, high-load punishment with less non-functional weight. Both rims and wheels are



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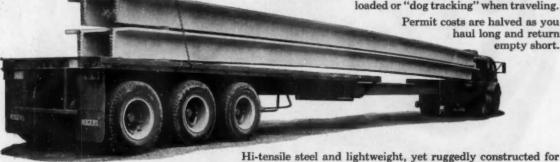


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> FLEXIBILITY with a unique deck that readily stretches from 35' to 45' or 55' in length with no sag when loaded or "dog tracking" when traveling.

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Gardner Cartage of Cleveland, O., hauling prestressed concrete double T sections with deck extended.

durability. Basic design and operational features measure up to the high standards consistently maintained in all Rogers Trailers.

Ultra-modern, lightweight wheel suspension. Controlled brake reaction; no hopping or chattering.

The frame is built from structural steel members. No rolled or pressed sections used.

Available in a spread tandem or 2 and 3 axle rear assemblies and built in capacities from 25



length and efficiently handles concrete forms and miscellaneous equipment.

A sizable cargo of heavy steel beams is readily accommodated and carried on the expansive 55' deck of the X-TENDIBLE High-Flat.





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ROGERS BROTHERS CORPORATION . ALBION, PENNSYLVANIA

VALIANT HOLDS ITS VALUE LIKE IT HOLDS THE ROAD



There are many solid reasons for Valiant's solid resale value. Its all-welded Unibody is one reason and Valiant's powerful inclined "six" engine is another.

Chrysler Corporation's exclusive Torsion-Aire Ride is a third reason. Then there's good looks that'll stay in style for years. Of course, there's Valiant's low initial cost, too.

So if you're a fleet owner who likes to get his money's worth all of the time—when you buy and when you sell—Valiant's your answer. See your nearest Valiant dealer today!



A Chrysler-Engineered Product... Ol Valiant.

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Used and recommended by over 70% of all manufacturers of trucks and buses

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Expertly engineered pistons make a big difference in engine performance—and operating costs. By the test of experience, Zollner "Engineer Approved" Pistons are by far the dominant specification of fleet operators. Engine manufacturers work hand-in-hand with Zollner engineers in the development of the most efficient piston for each engine service. Over 70% of all makes of trucks and buses are Zollner equipped. By always specifying Zollner for your engine reconditioning, you will be sure that your piston equipment is expertly designed, precision-made and engineer-approved for the utmost performance and economy.

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DOMINANT POPULARITY IS THE BEST ASSURANCE OF FINEST PERFORMANCE

Frank Benitz, Transportation Superintendent, stands beside one of Dugan Bros.' 1,800 three-quarter-ton delivery trucks. In back-ground, one of Dugan's 34 stainless steel



Not a single casing failure with Gates High Capacity' tires...

says Superintendent of fleet that travels 19,000,000 miles a year

WHY? Because Gates HC 'High Capacity' Process pretensions the thousands of tempered nylon cords within the tire body to equalize internal stress. RESULT? More even load distribution, minimizing the effect of shock from impact. END RESULT? Longer casing life, greater retreadability, extra reliability — literally built into every Gates Tire bearing the HC emblem!

"19,000,000 miles a year PROVE the lasting quality of Gates Tires," says Frank Benitz, Transportation Superintendent, Dugan Bros., New York.

"Our fleet runs 19,000,000 miles a year in servicing our home deliveries in New York, New Jersey, Connecticut and Pennsylvania," Mr. Benitz continues. "We maintain accurate records on all of our tires — and we have never had a casing fail from impact on any of our Gates HC 'High Capacity Nylon Tires.

LOOK FOR THIS EMBLEM ON EVERY GATES 'HIGH CAPACITY' TIRE

Illustrated here: Gates HC 'High Capacity' Cargo Nylon

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against ANY failure, including blowouts, bruises, rim-cuts, etc., for full tread life. No time or mileage limit. Should tire fail, you will receive a new tire at once, with full credit for unused mileage, based on Gates standard adjustment schedule.

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Gates Truck Tires

TPASSE

IT'S ALL-NEW ...

Only Divco's 'space age' insulation

- 25% LIGHTER
- GREATER EFFICIENCY
- LONGER LIFE

In this age of modern materials, modern construction and production methods, why settle for less, when you can get modern refrigeration in a route-designed DIVCO?

Expanded Polystyrene Bead, Styrofoam, Fiberglass, laminated "sandwich" assemblies, ribbed thermoplastic panels-these are just a few of the "space-age" features that save space, weight and cooling costs in DIVCO Snub-Nose and Dividend delivery trucks.

DIVCO factory-installs Freon and ammonia systems

- **ROUTE-DESIGNED**
- ESS DOWNTIME
- **FACTORY-INSTALLED**

to meet your special mobile cold storage needs-including over-the-road blown systems and hold-over systems. And look at the door options DIVCO offers: Double-acting, center-opening bulkheads, sliding bulkheads, Dutch doors and curbsides (Dividend models only); at the rear, choose from single-hinged, twin-hinged or even sliding doors!

Why not plan now to call your nearby DIVCO Dealer and find out to your own satisfaction why routedesigned DIVCOs cost less to buy, less to operate.



LESS DOWNTIME-Even though DIVCO bodies are positively sealed against warm air entry and cold loss, construction permits rapid body panel replacement without disturbing insulation. Accessible chassis, engine and drive-train components give you a competitive edge in maintenance time, too.

FACTORY INSTALLED-Only DIVCO designs, builds and backs-up the complete truck for dependable, profitable multi-stop operation. There's no compromise. Everything from bumper-to-bumper-including the refrigeration

unit-is engineered and installed at DIVCO's Detroit plant for your DIVCO!



25% LIGHTER-Aircraft-inspired insulation methods and materials eliminate up to 1,000 pounds dead weight. Polystyrene Bead sandwich panel construction (above) helps maintain temperature, reduces loss of cold air. Plastic lining is strong, resilient and so durable even steam cleaning won't hurt it!

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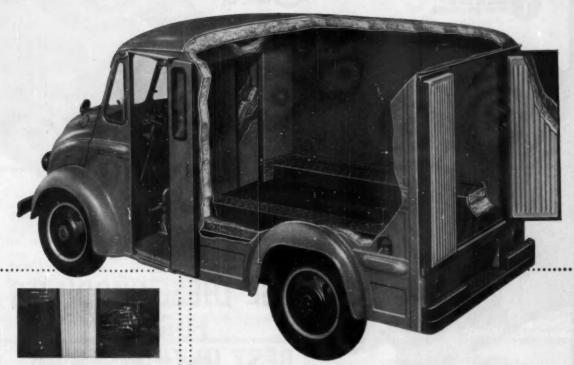
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gives you these important features!



LONGER LIFE-Revolutionary insulated rear door, typical of DIVCO's design breakthrough, was subjected to a lifetime of torture on this test stand. Opened and banged shut an equivalent of 8 to 10 years of route delivery use, the new door dramatically proved to us its value to you!

GREATER EFFICIENCY-DIVCO puts the right type of insulation where it counts! Cutaway of Snub-Nose model shows: 1 Integrallyconstructed sandwich slabs of moisture-impervious Expanded Polystyrene Bead in bulkhead panels and in optional sliding bulkhead doors. 2 Aircraft-type construction of rear panels and hinged doors on all models utilizes Expanded Polystyrene Bead protected by light, tough plasticribbed panels. 3 Styrofoam, used in cargo floors, won't absorb moisture.

4 Super-Fine Fiberglass serves as effective heat barrier in sidewalls, and 5 in roof panels of all refrigerated Snub-Nose and Dividend DIVCOs.

PENNSYLVANIA Allentown Wm. F. Deibert, Inc.	NE 2-8172	Pittsb: Koch : Readir Roodie
Altoone Keller Muter Sales	WI 3-8187	RHO
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ROUTE-DESIGNED for PROFIT-STOPS



FREE-TWO NEW FACT-FOLDERS FROM DIVCO! Refrigeration brochure gives complete photo-story, specifications on refrigerated, insulated DIVCO wholesale and retail delivery trucks.
 Money-saving booklet on the most modern truck leasing plan in the industry. • Send for both-today-or call your DIVCO Dealer.





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FIRST NAME IN TIRE VALVES

FOR ORIGINAL EQUIPMENT AND REPLACEMENT

Made in America to American Standards of Quality

Now, more than ever... OLDS can fill all your fleet needs!

THE EXECUTIVE FLEET

Where style and prestige are important considerations, Oldsmobile's Ninety-Eight is the obvious choice. It is the ideal car for the top men in your firm. The Ninety-Eight has all the comfort and convenience executives appreciate . . . all the fine-car luxury your important clients are accustomed to seeing. More body styles than ever to choose from, including three 4-door models!



Ninety-Eight Heliday Sedan

THE SUPER FLEET

When time and distance are big factors, the Super 88 is an ideal fleet car. Its new SKYROCKET Engine makes light work of long trips... its rugged Guard-Beam Frame and Twin-Triangle Stability provide extra safety for your men... let them arrive fresh and alert after a lengthy drive. A good investment, too, because of exceptionally high resale value... traditional with Oldsmobile.



THE DYNAMIC FLEET

For a business-like balance of performance and economy, be sure to consider the Dynamic 88! Powered with a livelier-thanever Rocket Engine, Oldsmobile's new Dynamic 88 is a standout performer in any company—and gives you a substantial extra dividend with the economy of lower-cost regular gas. A solid, full-size value!



THE ECONOMY FLEET

If you're looking for big-car performance with small-car cost and operation, the new F-85 is the perfect solution. This thrift-size Olds costs you less initially—delivers exceptional mileage on lower-cost regular gas. And it's a car your men will be proud to drive . . . powered by the full eight-cylinder zip of the new aluminum Rockette Engine. The F-85 is every inch an Olds—built for the fleet buyer who wants something better in a smaller car!





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"FLEET FACTS" FOLDER

Write for your copy to the National Fleet Sales Manager . . . Oldsmobile Division, General Motors Corp., Lansing 21, Mich.

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Engine Compartment Cable

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A CASCO ELECTRIC BLANKET FOR ONLY \$11.95

A \$20 order for any combination of Packard products qualifies you. All you have to do is figure your cable needs for the season. Ask your U-M-S supplier to explain just how easy it is to get one of these Casco Electric Blankets, twin or double size.





mileage-dimension



'61 FORD !!!!!!!

DESIGNED TO SAVE YOUR FLEET \$84 A YEAR PER CAR...AUTOMATICALLY

Ford has designed a car with a completely new approach to economy. New "takes-care-of-itself" features are deliberately designed to keep your fleet paying its own way right through resale time. The '61 Ford goes 30,000 miles between chassis lubrications . . . 4,000 miles between oil changes . . . and adjusts its own brakes. The chart at the right will show you many ways Ford saves. The savings are based on 24,000 miles a year per unit as a fleet average. Your savings may be even more.

The '61 Ford's outstanding economy is matched by plenty of traveling comfort and performance. Just check a few of the luxury features. Man-sized doorways, foam-padded front seats, generous protective insulation, stretch-inviting interiors and loads of accessible trunk space. Outside, the '61 Ford is four inches trimmer. Combine that with up to 25% easier steering and you have a new dimension in driving and parking ease.



Don't let useless maintenance costs cut down profits. Your Ford Dealer can help you plan your money-saving fleet of '61 Fords. FORD DIVISION. Tord Metal Medical Company.

OTHER FLEET CARS	1961 FORD
CHASSIS LUBRICATION (\$1.50 every 1000 miles) \$36.00	30,000-MILE CHASSIS LUBRICATION (Under nor- mal driving conditions)
OIL CHANGES (5 qt. @ 50¢ every 2000 miles) 30.00	OIL CHANGES (5 qt. @ 50/every 4000 miles) \$15.00
MUFFLER REPLACEMENT (Including Installation charge —once per year)	DOUBLE-WRAPPED
BRAKE ADJUSTMENTS (\$2.00 per adjustment—approximately every 6000 miles) 8.00	NEW SELF-ADJUSTING BRAKES (Mechanically adjust automatically for the life of the lining)
WAXING (Once per year @ approximately \$10.95)	FORD DIAMOND LUSTRE FINISH (Never needs waxing)
TOTAL \$99.9	TOTAL \$15.00

The figures represent estimates of average national cost of owning and operating a 1950-60 full-sized American car for a year and driving it an average annual distance of 24,000 miles as compared with the '61 Ford.

Beautifully built for economy and lasting value

MCQUAY-

PISTON RINGS
give
you...

7 WIPING EDGES

to restore lost compression and horsepower...eliminate oil consumption.

MCQUAY-NORRIS

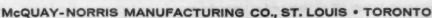
ISTON RING SET

WIPING EDGES

The famous Leak-Proof piston ring sit (including the outstanding "400" oil ring) has seven wiping edges. No other ring set has so many viping edges to save your customers gas and oil.

HEAVY DUTY LEAR-PROOF RINGS

Extra heavy chrome plating on the face of the top compression ring and on affi tails make McQuay-florris heavy-duty piston ring sets, exceptionally well suited for hard usage such as found in fleet and farin operations.



More details? Circle 121 on reply card inside back cover





says the customer

pencils

When you consider the vital job brakes must do the Brake parts you use for replacement become mighty important. They must combine the seasoning of experience with advanced engineering and their performance must leave nothing to chance.

These qualities are characteristic of EIS — The Brake Parts Line. Now, add informative packaging, quick-reference catalogs and wall charts, point-of-sale merchandising cabinets plus immediate availability from 39 strategically located warehouses. The result is a profit-producing Line that gets top position on most every order form.







BOOTHS 2554-5, 2619-20 at the IASI Show in Los Angeles

EIS AUTOMOTIVE CORP.

Middletown, Conn.



LUBE LOGIC

MOREY-SAVING IDEAS FOR AMERICA'S FLEETS

WHY GOOD OIL NEEDS GOOD FILTRATION

The best way to make sure you get premium protection from premium lubricants is to use a clean oil filter.

The new modern detergent oils will do things for your engines that a straight mineral oil would never dream of, but they're not a cure-all, and they can't handle the whole job on their own. That's why it's more important than ever that you back up a premium-grade crankcase oil with a good *clean* oil filter.

Modern oil filters do a fine job – so good, in fact, that they sometimes get neglected. But take a good look inside a filter, see what it does and what it doesn't do, and you'll see that you can't afford to neglect the filter if you expect to get top performance from your oil.

What does a filter do best?

Filters do their best work handling the medium-sized bits of contaminants that build up inside an engine. These particles get trapped pretty quickly, because the oil in an average engine circulates completely once every thirty seconds — a total flow of about 800 gallons an hour.

We mentioned the medium-sized dirt; but what about the other sizes? The heavy stuff takes care of itself—falls to the bottom of the crankcase and stays there until the oil is drained. But the finest particles are smaller than the pores in even the very best oil filter, so they go right through as if the filter wasn't there. Eventually these particles meet other particles, stick together, and then you've got sludge. Sludge sticks to odd corners of the engine and doesn't even get to the filter, so you've got a problem.

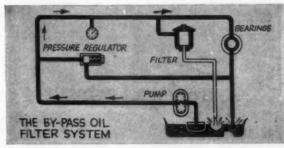
Enter detergent-dispersive oil

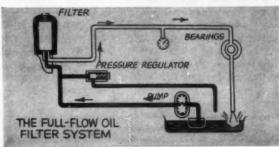
Detergent-dispersive oils, like Texaco Havoline or Ursa Oils, are specifically designed to keep these particles from sticking together, to separate the ones that have, and to keep the particles trapped within the oil stream. These carbon particles are so small that even a very thin oil film, like the one inside a loaded bearing, is still thick enough to cover the particles completely and keep them from scratching engine surfaces. The only way to get rid of these particles is to drain the oil.

But additives can do just so much, and if the filter isn't clean enough to do its share, the oil gets more work than it can handle. By neglecting the filter, you're simply not letting the oil do the job it does best.

It takes two to handle corrosion

Another vitally important job that the oil and the oil filter share between them is preventing corrosion from acid and water. All engines produce some moisture and





acid as they burn fuel. A good filter in good condition can handle some of this water and acid, but only for a comparatively short period. After that, it's up to the oil, which is why premium Texaco motor oils contain acid-neutralizing chemicals.

By-pass or full-flow?

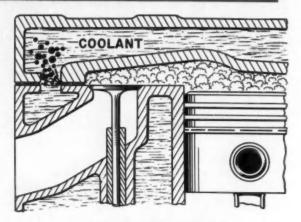
A full flow filter, as you can see in the diagram, filters all the oil every time around; a by-pass type filters only a part of it. Both types have a relief valve that measures the amount of pressure it takes to push oil through the filter element. The dirtier the filter, the more pressure is required. When the filter element is clogged, the valve opens and the oil goes through without being filtered at all.

What's the answer?

The best answer will be the one you get from your Texaco Lubrication Engineer, and it's best to consult him because the ideal filter-change interval depends importantly on the type of service. In particularly severe service, for instance, a filter change every time you change the oil may be a good idea. But it will pay you to find out exactly when to change filters, and to stick to the system recommended to you, because the most economical lubricant is the best lubricant, and you get the best performance when it's filtered.

LUBE LOGIC

Four tips



OIL IN COOLANT IS CLUE TO LEAKY CYLINDER HEAD GASKET

A few drops of oil floating around in the water in your radiator used to mean, at worst, that you had over-lubricated the water pump. But these days most water pumps are permanently lubricated, and if you do spot oil in the coolant, you may be in on an early symptom of a leaky cylinder-head gasket. The oil in the coolant is oil that has been forced past the leaky gasket by engine compression. The same leaky spot can also allow water to get into the cylinder, and then into the oil, which can lead to a corrosion problem in time. Moral: oil in the radiator is your tip-off that it's time to run a compression test.

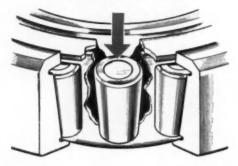
LIGHT TOUCH BEST FOR SPEED-OMETER CABLE LUBRICATION

The speedometer is another one of those places where too much lubrication is as bad as too little. If the speedometer cable has been greased too heavily, the grease will eventually be forced up into the speedometer head, and gum up the works.

If you're having this trouble, the first step is to get rid of the excess grease. Pull the cable out of the casing, wash it with kerosine or other suitable solvent, and dry it thoroughly. Incidentally, if you spot any kinks or frayed ends, you'd better replace the cable.

If the old cable is still sound, relubricate it sparingly following this procedure: place a small amount (about a teaspoonful) of Multifak 2 in the palm of one hand, and insert the end of the cable into the conduit housing. Spread a light film of lubricant on the cable as you push it into the housing, taking care not to get any grit or dirt on the cable or the lubricant. When you reach the halfway point, stop lubricating. Leave the rest of the cable dry; otherwise, the excess lubricant will eventually get into the speedometer head again.

CHANGE THE DIFFERENTIAL LUBE, SAVE THE BEARINGS



It's vitally important, on new trucks, to make the first change of the differential lubricant *promptly* at the mileage recommended by the manufacturer. By that time, the factory-installed lubricant may be highly abrasive, because of minute particles of metal worn off the gears during break-in. If you don't change the lubricant you'll get very rapid wear of differential gears and bearings.

One of the most likely spots for this wear to show up is on the thrust area at the ends of the anti-friction bearing rollers. You'll know it's worn if you see that the recessed area in the center of the roller ends has disappeared. If roll-end wear persists long enough without correction, pinion and ring gears get noisy. When it comes to that, your only option is to replace the bearing. Moral: whatever you do, don't stretch lube intervals, especially on new vehicles.

WHAT'S NEW FROM DETROIT

ON ALTERNATOR-EQUIPPED CARS, reversing polarity on the alternator system will burn out the wiring harness and may damage the alternator. Use extreme caution when installing a battery, attaching battery charger or booster battery. When fast-charging battery on alternator-system cars, disconnect both battery cables. When using a booster, negative lead of booster must be connected to negative (ground) terminal of car battery; positive booster lead must be connected to positive terminal of car battery.



SURGING DURING ACCELERATION between 30 and 60 mph on 1960 Chevrolet trucks equipped with the 235 cu. in. engine is caused by lean air-fuel mixture. The condition can be corrected by installing a richer fuel metering jet. The richer jet is available from manufacturer's dealers as Part No. 7001860; it's characterized by the long tapering approach orifice instead of the squared orifice of the original part.

to cut shop time

WHEEZE INSTEAD OF WHIZ? power loss may be due to—

clogged muffler-bent or plugged tail pipe



One of the minor mysteries that occasionally crop up in gasoline-engined trucks and fleet-cars is a sudden inability to achieve the speed and acceleration you used to get without any trouble. The engine will run fine until you get to, say, 10 mph in first, 20 mph in second or 40 in third gear, and then it simply won't go any faster, even if you push the pedal to the floor. (The speed at which your car "flattens out" this way will vary depending on how fast the engine runs in each gear.)

If any of your trucks have these symptoms, check first to see if there are any obstructions in the tail-pipe or muffler. If the pipe is kinked or bent, or the end of it clogged with a wad of dirt, the resultant back pressure will keep the engine from revving up beyond a certain point. A clogged muffler will create the same effect, in which case the best solution is simply to replace the muffler.

railin' the Mail with AL



Dear Al,

One of our vehicles has a starting problem. Even with the choke pulled all the way out, it won't start, no matter how long I crank the engine. But when I remove the air cleaner and put my hand over the air horn, it starts up right away. I changed the fuel pump and carburetor, and recharged the battery, but the car still won't start unless I go through the routine I just described. What's wrong?

E. Z., North Tonawanda, N. Y.

The fact that the engine starts when you take off the air cleaner and cover the air horn with your hand proves that the trouble is in the manual choke — probably the butterfly valve isn't closing properly. Next time you have the air cleaner off, pull the choke all the way out and look at the valve to see that it's closed.

If it doesn't close tight, several things could be causing it. Maybe the air horn itself is distorted, so there isn't room for the valve to close all the way; or

maybe the choke lever is simply hitting something that prevents full movement. Also check to see that the clamp screw on the choke lever isn't slipping. If none of these checks solve your problem, you'll probably have to loosen the choke lever clamp screw, shorten up on the bowden wire until the valve closes completely, then re-tighten. In this case it's better to shorten too much than too little. Another possibility to check at the same time is a broken spring or bent stem on the small auxiliary air valve in the choke butterfly, which would allow the valve to stay open all the time.

Dear Al

I have a problem with a panel delivery truck that makes its oil very black very soon after changing. I know a detergent oil gets dark because it picks up carbon, but this looks to me like an extreme case. I've tried changing the filter with every oil change, but after a thousand miles of travel the oil is black and gummy again. I'd like to know how dark is too dark for engine oil, and how I can correct this situation if it's really a bad one.

E. A. M., Lemon Grove, Cal.

An engine will darken its oil very quickly if it's making fuel carbon faster than oil drains can remove it. Changing the filter won't slow down the darkening very much because the carbon particles that make the dark appearance will pass right through any filter.

The only reliable way to find out whether an oil is so dark that it's harmful is with chemical testing, which costs a lot more than an oil change does. If the engine is functioning properly, your best solution would simply be to change the oil more often than every thousand miles. But there are several small adjustments you can make that will prevent your truck from making excessive amounts of fuel soot.

For example, you'll get a lot of fuel soot if the automatic choke isn't working, if it sticks or binds, or if it's adjusted too rich. You'll get the same problem if the cooling system thermostat is defective; if the manifold heat control valve binds or is stuck in the open position; if low-speed carburetor settings are too rich; if the intake valve on the carburetor float bowl leaks; if the carburetor air-filter is clogged; or if the piston rings are worn prematurely or are inadequately broken in. You can spot this last problem if you're getting poor oil economy along with the darkening. It's also worth noting, in this connection, that idling an engine for more than five minutes at a time will darken the oil prematurely, even if everything else is perfectly adjusted.

Shoot in your puzzlers to Trailin' the Mail with Al, at Texaco's Fleet Sales Division, 135 East 42nd Street, New York 17, N. Y. There's a real fine group at the Division — ready to serve every "on-wheels" fleet from coast to coast.

LUBE LOGIC

DON'T LET WORN SHOCK-ABSORBERS HIKE YOUR INSURANCE RATES

Next time you're meditating on safety measures to help keep your insurance premiums down where they belong, don't overlook the shock absorbers.

Shock absorbers make driving safer by snubbing rebound from road bumps. A car or truck with weak shock absorbers can become very skittery on rough roads, sometimes bad enough to make the driver lose control.

Shock absorber condition affects wheel alignment, too. When the wheels on a car or truck are out of alignment, you get shimmy and violent jumping on rough roads, another way you might conceivably lose control.

When should you check the shocks?

There's no formula, because service life of shock absorbers varies with different types and different roads. But here's a helpful statistic: seven out of every ten passenger cars with more than 20,000 miles on the clock need new shock absorbers.

You can spot the need in various ways. The bounce test works fine, provided the car or truck is light enough. Simply bounce a parked vehicle, and if it keeps bouncing



(more than one or two rebounds) it probably needs new shocks. A hollow clunk from the front end is another symptom you should check out. Uneven tire wear, particularly on the outside edges of the tires, is another clue that it's probably time to replace shock absorbers.



MEW TEXACO TRUCK STOP

The new edition of Texaco's Truck Stop Folder is now available, and it's more valuable than ever. Lists over 300 locations

from coast to coast where Texaco service is available 24 hours a day. Has a bigger, clearer map, and contains up-to-the-minute listings of all state length-and-weight regulations. Bonus feature: Texaco's new Truck Stop Folder stays legible longer, because it's printed on slick paper that resists smudging. You can get a free copy from your local Texaco representative or direct from Texaco Inc.



TEXACO AUTOMOTIVE ENGINEERS



Every month we'll bring you news about the latest "doings" in servicing and lubricating your trucks. We'll also bring you "sleepers," little angles, easy to overlook, where big savings in money and time can be made. But month in, month out, your local TAE is the best source of money-saving lubrication ideas. Don't forget that "Lubrication is a major factor in cost control."

Texaco Inc., Fleet Sales Division, 135 East 42nd Street, New York 17, N. Y., Dept. CCJ-110.

TEXACO



Canada · Latin America · West Africa



PROFITABLE Fleet ideas from DENVER-CHICAGO

A NEW 16-PAGE REPORT BY CCJ'S MOBILE EDITORIAL TEAM



Kick-off for this report was special conference between D-C President George Kolowich, Jr., and CCJ Editor Bart Rawson. Next came a meeting with top management. From left are CCJ Technical Editor

CCJ VISITS



DENVER-CHICAGO

"First team" status for Operations, Maintenance, Terminals and Safety have helped move D-C into the "Top Ten" carrier class

Sound management

UNIQUE AMONG the nation's big carriers is Denver-Chicago Trucking Co.

• It is controlled by a family that had nothing to do with its early history.

• It shoots consistently in the high 80's or low 90's when it comes to operating ratio.

• It holds the only direct coast-to-coast truck operating rights.

• It sponsors a basketball team to express its



Ed Shea, D-C Vice President Nick Catsinas (personnel), Treasurer Glenn Knight, Vice President Donn McMorris (terminals), Vice President Ken Maguire (sales), Western Division Manager Kemp Shacklett,

Vice President Ken Sheehy (traffic), Editor Rawson. Not shown are First Vice President Hugh Kolowich, Vice Presidents Jack Fleck (Los Angeles) and William J. Blohm (operations), Secretary John Finan

is secret of efficient growth

deep interest in community affairs and as a means to attract highly-qualified executive trainees.

 It has an unbroken record of constant growth throughout its 30-year history.

CCJ's mission to Denver: Capsule the fleet's history, ferret-out major success ideas and document them for readers.

The company's history dates back to 1930

when two trucks, bearing the Denver-Chicago name, made their way between Denver and Chicago. By 1934, the company had 17 tractor-trailers rolling on Denver-Chicago and Denver-St. Louis runs. The principal load was meat. It's still an important part of current reefer operations.

In 1937 merger proceedings were begun with Denver-Los Angeles Trucking, extending the

TEAMWORK is first order of the day

system to southern California. A few years later, other lines were purchased, giving rights to Kansas City and Seattle. But the big breakthrough came in 1946 with the acquisition of Adams Transfer and Storage with operating rights between Chicago and New York City and including Syracuse, Albany and Cleveland. Thus Denver-Chicago became the first coast-to-coast carrier.

Meanwhile, the Detroit Cleveland Navigation Co. was booming along in Great Lakes shipping circles. It was principally owned by George Kolowich, Sr., and his two sons, George, Jr. and Hugh.

In 1952 the Kolowichs bought controlling interest in Denver-Chicago. The transition was watched with considerable interest by competitors. The new owners had no experience in operating a truck line, and this was no ordinary operation. It spread from coast-to-coast.

Right from the start it was apparent that while the Kolowichs may not have known much about trucking, they knew a lot about how to run a business. The senior Kolowich poured all of his business acumen into the top management post, while his two sons dug in at the grass roots of the sprawling organization.

In 1954 the senior Kolowich passed away and George, Jr., took over at the helm. Brother Hugh is First Vice President of Denver-Chicago and is also President of Denver-Chicago Transport, a subsidiary tanker operation acquired in 1956.

From a gross of approximately \$20 million in 1954, the firm's revenues have grown to just over \$45 million in 1959. The company ranks among the top ten of the nation's common carriers and is probably at the top in operating ratio. A figure of 89.69 was the record achieved for the first eleven months of 1960.

George's management ability is coupled with a deep interest in competitive sports, which dates back to his varsity football days at Oglethorpe College. This is reflected in the way George summarizes his modus operandi: "Teamwork is the first order of the day."

This is literally true, because at 8:45 every morning, department heads and executives attend a 15-min briefing session reporting yesterday's events and today's problems.

These daily briefings were described in detail in an earlier story in COMMERCIAL CAR JOURNAL (June, 1957). Suffice it to say here that the reports cover complete details on maintenance and operations in each of the five major subdivisions of the system. They include pounds hauled, miles run, number of dispatches for each terminal, number of units out of service, and the reasons for individual road delays. They go on to report the number of trailers unloaded and "loaded to go" at each of the major terminals together with the "power" available. If there is an unbalance, it's up to maintenance, operation and sales to get it in balance fast.

George Kolowich also believes his firm has an obligation to the community. So, in 1955, he jumped at the chance to sponsor Denver's entry in the National Industrial Basketball League, then known as the Central Bankers. By so doing, he was providing a service to the community while satisfying his personal interest in sports.

In 1956 the Denver team became known as the D-C Truckers. Former Notre Dame All-American Johnny Dee, then basketball coach at the University of Alabama, was hired to put the team together. League rules limit the players to 12 and require that they must be amateurs and must be employed by the sponsoring company.

In the five years that the team has been a part of the Denver-Chicago operation, 15 squad members have "graduated" from player status. Eight now hold good jobs within the company. One is Seattle terminal manager, one is Casper (Wyo.) terminal manager, another is assistant to the vice president-personnel, one is in auditing and four are in sales.

League champions in 1958-1959, the team is working hard to recapture the NIBL championship for Denver. Budget? The team is self-sustaining. In fact, demand for tickets at last season's home games was so great that the number of season tickets had to be drastically curtailed to provide good seats for individual games. It might be added that the budget includes 25,000 free tickets a year to youth groups in Denver.



Six mornings a week at 8:45 AM, D-C's management team meets for daily briefing. Key men reporting are Verne Stiver (dispatch), Roy Sands (equipment control) and Bryce Allingham (maintenance). In less than 15 min, these

men and other department heads learn what happened yesterday, decide what needs doing today. As a team, they quickly work-out solutions that keep the system on an even balance. By 9, all know fleet's coast-to-coast status

Coach Johnny Dee and his D-C Truckers hope to regain NIBL league championship



CCJ VISITS



DENVER-CHICAGO

Pro golfers Ed "Porky" Oliver (below) and Dave Hill also boost D-C's public relations, sales and advertising goals



COMMERCIAL CAR JOURNAL, February, 1961

EQUIPMENT is key to profitable operations

DENVER-CHICAGO'S rolling stock is among the world's finest. For years the city of Denver was a breakpoint for equipment as well as freight. But as western bridge formulas changed and eastern size and weight laws increased, both power and trailer units became more universal.

Today the three-axle, cab-over-engine tractor and the 40-ft trailer is the basic combination. And it can roll anywhere on the system. True, there are a number of carryovers—shorter trailers that operate mostly in the east, and older, long-wheelbase conventional tractors which operate west of Denver exclusively.

But as new units are added, they are standardized on the cab-over, 40-ft. trailer combination. The basic specifications for both are shown in the table at right. Note that no tractor or trailer maker is specified. But individual components are standardized to an extraordinary degree.

To the casual observer it would appear to be a very mixed fleet with all manufacturers well represented. But all have the same 200-hp diesel engine, and nearly all have the same front axles, rear axles, transmissions and a number of smaller specific components. It is an interesting concept that has worked well from the maintenance viewpoint, minimizing stock, mechanic training and maintenance procedures.

All of the line-haul equipment includes sleeper cabs and every piece is generally assigned to

BASIC NEW TRACTOR SPECS

TYPE: 3-axle, COE tilt-cab with 143-in. wheel-base.

AXLES: Front—11,000-lb capacity, no brakes.

Drive—Manual shift, 2-speed with 4.41/1 and 5.91/1 ratios with V-belt drive to pusher axle.

BRAKES: Full air. 161/2 x 7-in. linings. with 12-cu

BRAKES: Full air, 161/2 x 7-in. linings, with 12-cu ft compressor, breakaway valve and trailer hand control valve.

CAB & EQUIPMENT: Aluminum tilt-cab, 80-in. with 28 x 72-in. sleeper bunk, dual air wipers, dual heaters, four-way turn signals.

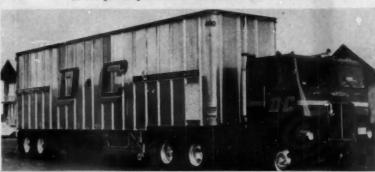
CLUTCH: Hydraulic assist, 14-in., 2-plate.
ELECTRICAL: 12-volt with 7-way ATA connector.
TRANSMISSION: 4-speed, direct in fourth.
FUEL TANKS: Two, side-mounted, 70-gal aluminum.

the same driver crew. This, too, plays an important part in maintenance.

For the western runs the three-axle tractor was imperative. D-C has made it standard for all of its equipment on the basis of better load distribution and higher allowable load factors. The three-axle units are both "twin-screw" and "pusher" axle types.

White-Freightliner Model No. WFTG162TP is typical of the power plants used on Denver-St. Louis route





Rolling Stock standardizes on components . . . is open to maker bidding

FIFTH WHEEL: Forged or pressed. ENGINE: 200-hp diesel with full-flow oil filter and oil cooler.

BASIC VAN TRAILER SPECS

DIMENSIONS: Length—40 ft overall. Width— 8 ft. Height—12 ft, 7 in. empty. Maximum inside.

SUSPENSION: Most have sliding tandems.

LANDING GEAR: 2-speed with wheel axle.

KING PIN SETTING: 36 in. from front of trailer.

FIFTH WHEEL HEIGHT: 48 in.

WHEEL LUBE: Oil seal with pyrex window for easy checking.

LINING: 1/4-in., 3-ply plywood. No roof liner. FLOOR: Steel hat section type with 5/4 oak.

The "pusher" axle provides power to the dead axle via belt drive. The details, now familiar to most operators, are shown in the photograph on the next page. A jack-screw arrangement on the forward pulley provides a means of applying the belt in a matter of minutes, using the tractor's slow forward movement to pull the belt in place and provide full tension. Denver-

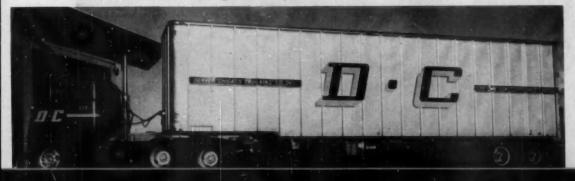


Kenworth Model No. TCC522C cab-beside-engine tractor (most with pusher axle) does Denver-Chicago run

Long wheelbase tractors such as this Diamond T Model No. 921NS are used between Denver and West



Model No. DCOT-405 Internationals with sleeper cab make runs between Denver-Chicago and Chicago-East



Chicago reports that it gets about 125,000 miles average life on the belt.

While increased traction was the first objective, a secondary bonus is tire life. From a base of 57,000 miles per rear tire without the belt drive, D-C almost doubled the mileage to 100,000 miles. Then something else was added, a process known as "power matching" of tires.

Right from the start the tires on each axle were carefully mated. But soon it was discovered that because of a slight slip in the belt (500 rpm to 499 rpm on dead axle) tires of slightly larger diameter should be placed on the dead axle. Tread test measurements now in progress predict additional tire tread life.

It should be added that Denver-Chicago never rests on its laurels. Additional tests are being made with the belts.

Very careful consideration is also being given to the newest type "twin-screw" equipment, where lighter weights, less complexity and lower cost brings the new units within "shooting range" of the belt drives. Until recently, "twin-screw" drives weighed about 750 lb more than the belt drives.

Being in disc wheel territory all wheels are disc and of the new wide bead design. All are meticulously coated with rust preventing aluminum paint.

Another pioneering approach at Denver-Chicago is in the area of electrical equipment. Like the rest of the industry, the company found electrical failures heading the list of road delays.

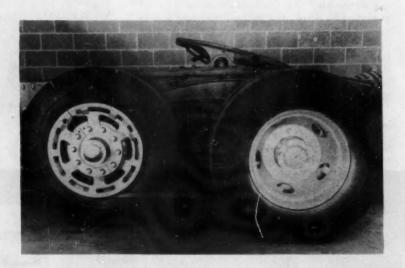
D-C was determined to do something about it. So they called in electrical engineers, laid the problem on the line, announced that they were ready to back up their determination with dollars. Not dollars out of the pocket, but dollars that could be returned in longer life of equipment.

Result: The newest type of charge-at-idle, high-output alternators, fully-transistorized regulators and new high-output 12-volt starting motors. Until recently the starting circuits were all 24-volt, requiring expensive and failure-plagued series parallel switches. The four six-volt batteries are retained in parallel pairs. They have an extremely high, 160-amp-hr rating to take care of the heavier draw on the 12-volt as opposed to the 24-volt circuit. The battery cables are also beefed-up.

The new rigs haven't run far enough to determine life expectancy. But they are already beyond the 100,000 mile mark with no road failures attributed to these primary electrical components.

Still another interesting feature is the fact that all tractors and trailers are purchased without brake dust shields. Biggest reason: Visual inspection of the brake linings on every trip, without pulling wheels. Another advantage: Cooler running brakes in the summer—particularly on the mountain runs. Only disadvantage lies in snow and slush during "dirty" weather. But the "goop" dissipates quickly, causes little or no trouble.

Pulley-and-belt drive transmits power to dead pusher axle on some tractors. Belt is under high tension, gives excellent traction. Tire chief Kermit Bretz says big bonus is in increased tire mileage by "power matching" tandems



DENVER-

MAINTENANCE is geared for long hauls

WHILE DENVER-CHICAGO is both fortunate and smart in being able to keep its road equipment modern and up-to-date, it certainly does not neglect maintenance. In fact its system and facilities are among the very best.

To do the job right, it has a magnificent shop, and well-trained personnel, under the direction of veteran Maintenance Superintendent, Bryce Allingham. The program is definitely geared for the long hauls. Denver is home base for nearly all the company's overthe-road hauls. From here the driver teams roll east to Chicago and to St. Louis, northwest to Seattle, and southwest to Los Angeles.

Basically, maintenance is carried out on a unit replacement basis. Ailing components are pulled at any of the company's shops and are replaced with rebuilt units. All the rebuilding is done at Denver.

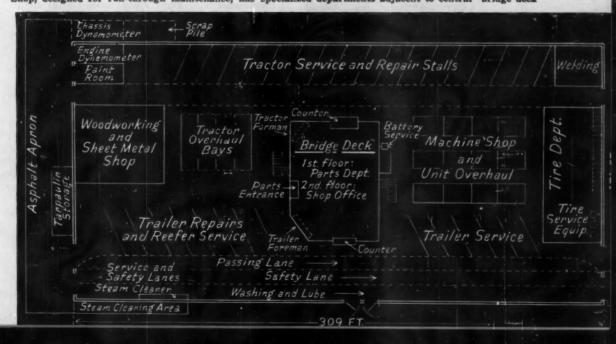
But importantly, the system isn't carried to extreme. For instance, we quickly discovered a couple of "frame overhauls" going on in the Denver shop. How come? Because if the crankshaft is OK, the fleet comes out well ahead by tying the truck up for 48 hours to replace valves, sleeves and rings, rather than pulling the engine for unnecessary work.

Pictures on the following pages dramatically show the shop's principal features, give "dimension" to the floor plan below. Suffice it to emphasize these highlights:

• The "bridge deck" office over the parts room which houses all maintenance office personnel. It is a true "island" providing throughthe-glass views of all shop facilities.

• A basic two-lane inspection area across the long east end of the building with an important third "passing lane." This permits

Shop, designed for run-through maintenance, has specialized departments adjacent to central "bridge deck"



CCJ VISITS

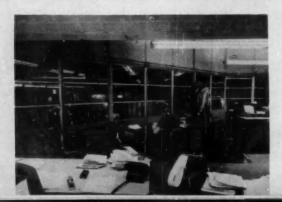


DENVER-CHICAGO

"BRIDGE DECK"







View above shows central position of "bridge deck" office with Parts Dept. underneath. In front of it are tractor overhaul bays. Across the aisle is the 16-bay tractor repair section with overhead exhaust system. Photo at left shows the three service inspection lanes with the trailer and reefer repair area at left side. Note how "bridge deck" gives full view of these areas. Bottom photo shows office area with Maintenance Supt. Bryce Allingham (pointing) and Asst. Supt. Ray Mahan looking out on safety lanes

units to leap-frog each other if one gets a minor delay.

- \$1/4-million in parts, taking full advantage of the fleet's standardization of components, and closely held to minimum needs.
- Both engine and chassis dynamometers that are used to the fullest extent.
- Outside aprons—at the east end for steam cleaning, and at the south end as an open air continuation of the wash area.
- A magnificent unit rebuilding and machine shop manned by veteran specialists—each in his own particular field.

controls BIG SHOP



View from opposite end of the shop shows upper end of tractor repair stalls and part of the unit overhaul department. Note again how the glass-enclosed "bridge deck" office gives full view of even this upper-most end of the shop. Reinforced concrete roof needs supporting pillars only in center section

• Radiant in-floor heating, a hedge against wetness as well as cold.

• Concrete-slab roof construction which eliminates posts except in center section.

Dynamometer programs are particularly intriguing. After a major overhaul, each engine—without exception—gets a test on the engine dynamometer. D-C figures better than 200,000 miles on a 200-hp diesel before a major overhaul is required. After a complete rebuild they get that much or more mileage.

The dynamometer test is carefully controlled over an eight-hour period. Anything, no matter

Unit rebuild and overhaul department is adjacent to Parts Dept., does all the specialized component repairs and overhauls from engines to air compressors. It's fully equipped to handle virtually every type of work short of crankshaft regrinding. Other D-C shops send components here for major overhauls



Shop has many unique features

how small, is corrected. When it's released, there's no need for the driver to "nurse" it. The engine dynamometer is used basically for reliability.

The chassis dynamometer is more of a trouble shooter. It is used for major engine tune-ups to make final injector settings, pump timing, etc. and to check out drivers' "no power" complaints.

Major maintenance effort goes into daily safety inspections, lube jobs, A and B inspections. The fact that long-haul rigs are individually assigned to drivers, works in the shop's favor. For, while drivers rest, the shop can take up to 10 hours for on-the-spot repairs without delaying schedules. Obviously, most jobs take less time, often are completed in an hour.

Because of high utilization and short turn-

around time the fleet uses no anti-freeze in road equipment. Drivers are instructed to drain if delayed en route. Back home it means some idling in bitter cold. Hence new tests on an engine heater (see picture below, at right).

The pick-up and delivery fleet is well maintained—but in an unusual way. Each truck or tractor gets a routine lube and oil change and safety check, but that's all. The rest is left up to the driver. If and when he reports something wrong, it's corrected immediately.

D-C has an unusually fast and thorough repainting and remarking program for its equipment. Particularly significant is the sign and decal program. One man can mark an entire rig (including PUC signs, company insignia and all necessary trim) in less than two hours. Reflective material and decals are used exclusively.

Parts Dept. stocks a \$1/4-million inventory, occupies floor area under the "bridge deck" office as indicated on floor plan. Note sign over counter, also the wallboard for fast parts identification

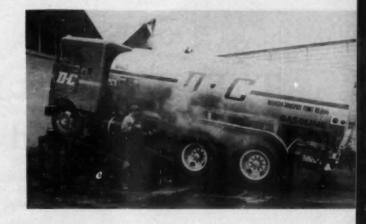
Researched by D-C, a self-powered engine heater is now in development stage. Unit shown here on test bench is gasoline or diesel-fired, has heat coil, fuel pump, fan, thermostat. It gives fast starts





DENVER-CHICAGO

D-C's special steam rack makes cleaning undercarriages a snap. All tractors get a routine beauty treatment in addition to special cleaning before major work in the shop. Tanker unit here gets the works to remove accumulation of ice and snow from fenders and chassis. Note how rack gets forward axle off ground to speed cleaning



Trailers get a regular beauty treatment also. Special aluminum brightener is used in high pressure sprayer to cut diesel smoke stains, make trailer "come clean." Brightener and cold water rinse are sprayed at 200 psi. A 40-ft van takes about a ½-hour



Chassis dynamometer is outside shop to hold down noise. It's used regularly to check-out drivers' "no power" complaints and to make final pump adjustments on major tune-ups. Rig here was producing better than 150 road horsepower at 50 mph when this picture was snapped by Ed Shea



Engine dynamometer is kept busy five days a week breaking-in rebuilt engines—both diesel and gasoline. The 200-hp diesel on the dynamometer (at left) is midway through its 8-hour check. Engine test starts at 1200 rpm, is gradually boosted to 2100 rpm, with the last half hour at full throttle



TERMINAL PLANNING fills present and future needs

CCJ VISITS



DENVER-CHICAGO Among unusual features: Doors that roll out, lights that shine in, and a code that nips goofs in the bud

DENVER - CHICAGO'S ultra modern Denver terminal facility is only four years old—yet, at busy times, is already nearing the saturation point. "But," says Donn McMorris, Vice President—Terminals, "we're not too worried. We have a philosophy that terminal design must change constantly with equipment design.

"We figure that, in the near future, equipment design may change radically with the coming of the divided super roads. Trucks will undoubtedly be bigger, higher and wider, and may well be restricted to interstate roads only.

"Hence, while we own property farther out as a hedge against the future, we may well never use it for Denver terminal facilities." While the 33,000-ft Denver terminal looks like a standard operation, combining a 672-ft towveyor with a half dozen fork lift trucks, it has some unusual features.

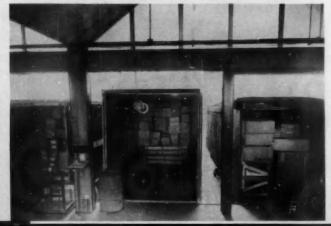
The 71 doors open up and out, sliding along the overhanging roof. This gives added height in the loading area with less height in the door itself. And the overhanging roof provides excellent weather protection.

Loading positions are strategically assigned so that cargo does not have to make a full swing on the dragline before reaching its destination. This not only saves time, but greatly increases dragline utilization.

Perhaps the most interesting is a special cod-

Terminal has 71 bays with doors rolling up and out to save space. Dragline motor in basement is easily accessible for routine maintenance or major service Spotlight is focused into each trailer, eliminates portable lighting. Note amount of light in trailer even with bright sun glaring through the doorways







Denver terminal and shop area covers 15 acres. Saw tooth roof at right marks the terminal. Same style roof identifies the shop in left background of photo

ing system. By using abbreviations, numbers and symbols, terminal personnel can easily trace an LTL shipment. This means that responsibility for the handling of each shipment can be specifically determined. This system results in more trouble-free handling.

As a trailer is loaded or unloaded, it is promptly moved to make room for another one. The terminal has six yard donkeys working full time

shuffling trailers. These are re-worked army surplus four-by-two tractors equipped with hydraulic fifth wheel and industrial-type short wave radios. Drivers can even couple air lines without getting out of the driver's seat.

Pickup and delivery is accomplished with a fleet of more than 125 pickup and delivery units. These consist of radio controlled straight trucks as well as tractor and trailer units.

There are 100 trucks, 332 tractors and 314 trailers in D-C's pick-up and delivery fleet. Most of the power units are bought new for the job, only

a few are retired road tractors. Most popular combination is snub-nose tractor with 22-ft trailer. Two-way radio use is growing at larger terminals



and finally-A salute to a

Magnificent safety record



B. E. McEntee heads D-C's safety program

SAFETY AND driver training go hand-inglove at Denver-Chicago. The program is simplicity itself, but extraordinarily effective.

Under direction of veteran Safety Director B. E. McEntee it consists of but a few steps. Some are obvious. All are direct. One is perhaps attainable only in an outfit with the size and stature of D-C. See if you spot it.

All drivers are assigned in crews to individual pieces of sleeper equipment—a boon to maintenance as well as

There are six driver supervisors constantly patrolling the routes, three based in Denver, one each in Los Angeles, Chicago and Buffalo. Two are former D-C drivers. There is also a chief line driver supervisor.

All driver applicants must have five years of diesel road experience . . . without accidents. The background check includes criminal records and credit ratings. Up till now there has been no shortage of qualified driving personnel.

Even so, a retiring driver is being encouraged to open a new driver training school in Denver, patterned after the North Carolina setup. For D-C, it's a hedge against the future.

New drivers are always teamed with a veteran. They are carefully briefed on both operating and breakdown procedures.

Formal part of program includes only a monthly bulletin to drivers, addressed to the home for family attention as well. Round-theclock dispatching, plus the long-haul routes preclude regular safety meetings.

Then comes the pay-off

How well does it work? This well: During fiscal 1959, the road drivers rolled up 43,272,764 miles with 96 accidents. The rate: 0.22 per one hundred thousand miles!

D-C operated in "the wide open spaces" and also extensively in high density areas. Anybody who's traveled U. S. 30 coast-to-coast recently knows how much city driving is experienced. And there's still lots of ice and snow in the mountains, not to mention steep grades and winding roads.

This is an admirable record in any language, especially when you consider the distances and varied conditions involved in a coast-to-coast operation.



Unexpected event at time of CCJ Editorial Team's visit was Denver's first snow fall. One result was cold fingers for Editor Rawson when he checked-over a D-C tractor



COMPILED by the EDITORS of COMMERCIAL CAR JOURNAL

AT YOUR SERVICE . . .

With warm weather not far away,

better think about getting ready for Spring. If your fleet operates in the cold weather belt, check to see if cold weather lubricants have been changed back to the regular grade. Many manufacturers recommend using a light oil in the crankcase in extremely cold weather. If your fleet does this, it's near time to switch back to your regular SAE 20 or 30 oils. Same thing goes for transmission, rear axle or final drive lubricants. If you switch to a lighter gear oil, or have diluted it with kerosene for the cold weather period, now's the time to drain it out. Get back to the correct viscosity recommended by the manufacturer. Better schedule it for the next PM check, or at least before you send equipment out on a new job.

Never apply power to a gravel plant, or an electrically-powered portable plant which has been moved, until you make sure generator and plant are grounded with the ground rods finished. This is a "must" if you're to prevent serious accidents. Drive ground rods deep so they will contact moist earth.

If the ground is extremely dry where rods are located, pour water around them. Then when starting the motors, push only one starter at a time. If all starters are pushed, it imposes too much load on the generator.

What does your fleet do

for mobile lubrication and fueling equipment? Many off-highway fleets and contractors build their own—using an old chassis or flat-bed truck and then adding the necessary drums, hoses, and pumps.

In recent years, more and more fleets are finding it better (and cheaper) to buy a whole "package." This may be an entire truck, a special body or a small two-wheel trailer—each equipped appropriately for the operation involved.

We recently received a brochure from the Cypher Co., Pittsburgh 6, Pa., showing this company's broad line of portable lubrication equipment. It includes large van models, open flat-bed rigs, smaller pick-up trucks—mounted units and even small two-wheel trailer jobs. Each model is offered with a wide variety of servicing equipment. If you're planning to set up a new lube truck for the coming season, you might be interested in looking over this brochure. If you'd like a free copy, just circle 305 on the reply card inside the back cover.

CCJ Editors Visit L. H. Houck

L. H. Houck (with camera and safety hat) is CCJ's well-known construction maintenance field editor with headquarters in Jefferson City, Mo. He travels thousands of miles annually getting articles and pictures for this special section of COMMERCIAL CAR JOURNAL and is a regular contributor to most issues. Editors Ed Shea (standing) and Jim Winsor (in new Mobile Office), on the eastbound leg of a 5000-mile shakedown cruise at the time, popped-in on Houck to plot strategy for future articles.





Overinflation and a severe impact combined to cause this cord rupture



The same combination as at left was the cause of this "too soon" failure

Are Your Tires Getting TOO OLD—TOO FAST?

Here's a complete trouble shooting guide to help you make more money by getting more work from 'em

YOU CAN DO something if your tires are getting too old . . . too fast.

Photos on these and the following two pages dramatically illustrate needless waste in tire life. True, you have to wear 'em out to make money. But you can make *more* money by preventing premature tire failure.

What causes early tire scrappage? You're familar with the list. It includes overinflation, underinflation, overloading, heat, oil, grease, oxygen, water, sharp objects, abrasion and hard bumps.

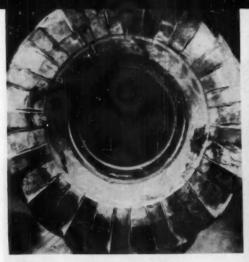
And you know early scrappage can be traced to almost every part of the job . . . poor purchasing, careless storage, improper shop procedures, too heavy work loads, untrained drivers, defective equipment.

rough haul roads, uncontrolled on-highway movement, and insufficient preventive maintenance and inspection.

Getting longest tire life starts when you buy tires. In brief, select the right size, the right type and the right quality.

When tire and rim size don't match, the most quickly apparent cause of short life is bead damage. Not so easily seen—until it's too late—is what happens when the mismatch only causes a slow leak. For example, with tubeless tires, the pattern is this: Chronic underinflation, excessive sidewall flexing, sidewall failure

Tire makers offer construction fleetmen a wide choice of treads . . . for particular job conditions

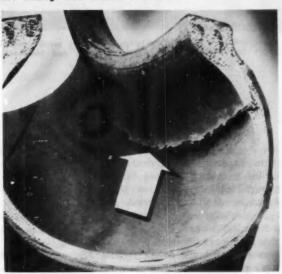


Sidewall cracks that shortened this tire's life came from underinflation



Loss of air due to slow leak caused excessive flexing to ruin this tire

Excessive sidewall flexing because of overloading was behind this break





Impact blowout (at arrow) combined with overload and/or speed did this

and for specific types of equipment. You're wasting tread when you use the wrong one in the wrong place. Low tire cost doesn't start with buying the cheapest tire. It does start with buying the tire that will give the lowest tire cost for the job to be done. When properly cared for, quality tires give the extra life that offsets their somewhat higher initial cost.

Tire deterioriation due to poor storage is not always readily seen. It sometimes shows up as short tread life or other premature failure for which there is apparently no immediate cause.

Makers recommend you store tires in a cool (40 to 60 deg F), dark place. Both sunlight and heat shorten tire life. Keep them dry and away from oil, lube and fuel . . . as well as their vapors.

Oxygen in the air or in the form of ozone generated by electrical equipment deterioriates tires. To reduce this useless wear, store tires away from wind, draft, other air currents . . . and electrical equipment.

Horizontal stacking (on their side) of tubeless tires makes them difficult to inflate. Store them vertically (on their tread) but have the support wide enough so a crease is not formed across the tread face.

Hooks, chains, cables and other handling equipment can damage beads, especially on tubeless tires. So will standard lift truck arms. And even if the arms are broad, smooth and with well-rounded radius, don't drag them against the bead. Slight damage to the bead can result in a slow leak.

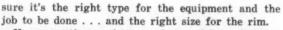
When it comes to putting tires into service, be

Tires: Too Old-Too Soon?

Continued



Stone lodged in this tire cut can do more damage than just slice off lug



Keep your tire service area clean and free of grease and oil. Follow maker's mounting and demounting instructions carefully. Based on experience, they're designed to keep that tire going as long as possible.

Match and mount duals carefully. Outside diameter should be within ¼-in. Greater mismatch than this results in rapid wear of the larger tire, scuffing of the smaller. And be sure the inner tire's valve is accessible. It won't get the regular checks it needs even if it's just difficult for your tire crew to reach the valve.

Be sure, too, that you have the right shop equipment and that there's enough of it. Makeshift procedures can damage tires when the right equipment is not on hand.



Stones in cuts tend to work inward leading to cut cords and blow-outs

It takes beef to service

tires in construction service. But unless carefully controlled, that same beef can damage tires. Use modern, powered equipment. It has the necessary beef, but it can be carefully controlled.

Incidentally, new tires put in service in the fall and winter last longer. Reason is that the cooler a tire runs, the longer it lasts. Tires run during the winter have thinner treads when summer arrives, therefore run cooler. Some say new tires put in service in summer wear 30 per cent faster than those with a winter's wear.

Once in service, tires face needless loss of service life through overloading, underinflation, overinflation, wheel spinning, pivoting, load jumping, vehicle parts rubbing tires, cuts from dozer blades, impact with sharp, cutting or bruising objects, excessive speed, driver carelessness and bleeding while hot.

First place to watch is matching of tire maker's recommended inflation pressure with the load to be hauled. Overloading causes rapid heat build-up, excessive side wall flexing and cord breaks, blow-outs due to impact. Calculate your loads and pressures as suggested by the tire maker. You'll get longer life . . . and easier adjustment when it comes to warranty claims.

One often overlooked form of overloading is temporary overloading. For example, as a result of a weight shift on a steep downgrade. The extra load on the forward tires sets 'em up for a blow out.

Sometimes a job demands overloading. But you'll



Cuts (at arrows) in this tire were neglected. Result is shown at right



Laying tread rubber back shows resultant separation from neglected cuts

pay the price. The experts estimate that a consistent 20 per cent overload shortens tire life 30 per cent.

Keep your equipment operators informed as to the cost of the "shoes" on their equipment. They'll be more inclined to report tire troubles before they become tire failures. They'll also better heed your suggestions for tire care.

Such suggestions can be summarized as avoid (1) running over spillage or sharp objects, (2) spinning wheels, (3) bumping tires to speed unloading, (4) pivoting on one wheel, (5) driving over deep ruts or chuck holes, (6) jamming on brakes, (7) rubbing side banks, (8) speeding or (9) parking on a greasy or oily spot.

Equipment itself can be a

cause of tire damage. Alert operators and equipment inspectors to watch for wheel misalignment, worn bearings that allow wheels to wobble, grabbing brakes, broken springs and other mechanical defects that shorten tire life.

Haul roads are an often neglected source of tire troubles. Don't build 'em with sharp turns, steep grades that cause tire spinning or high crowns that cause inside tread wear. Once in use, keep them free of spillage, rocks that come to the surface and "wash boards."

On-highway operation shortens construction equipment tire life, too. Three biggest tire killers here are excessive speed, stopping too quickly and riding the edge of the pavement. Speed boosts tire tempera-



This tire illustrates typical rubber deterioration due to oil or grease

tures rapidly. Most tire makers say not over 30 mph on-highway.

Most basic PM for your tire service crew to watch

Tires: Too Old-Too Soon?

Continued

is tire pressure. As the photos show, much premature tire failure at least starts with over or underinflation. A quick check is to look at the tread. If it's worn in the center, watch for overinflation. If the center's good but the edges are getting smooth, watch for underinflation.

Sometimes results from pressure checking can be dramatic. In one fleet, it was found that less than half the tires in service were being operated at proper inflation. Some were up to 25 psi off. A rigid PM program went into effect. It kept nine out of 10 tires within 5 psi. Minor damage was repaired promptly. Result was an overall boost in tire life of 46 per cent.

Daily inspection for inflation, cuts, breaks and imbeded debris pays off—as does prompt repair. The sooner you repair tire damage, the less your repair cost and the longer your tire life.

Check tire inflation when

tires are cold. Don't bleed a hot tire. It will only flex more, build-up more heat. Result will either be a blow-out or, when the tire cools, an underinflated tire.

Around-the-clock operation sometimes makes a "cold check" impossible. If you have to do it "hot," figure in advance what pressure is OK. It will be higher than that recommended because of pressure built-up due to heat generated by use.

Heat is a three-way enemy of tires. It cuts the strength of the rubber and the cord as well as cord-to-rubber adhesion. Heat damage is usually hidden until it causes a cord break, blow-out or other tire failure.

Overinflated tires put high stress on the carcass, are more susceptible to impact blow-outs. They not only get bald in the center, but, since they have less traction, tread wear is rapid due to spinning. And hard tires cut easier, too.

Underinflation, in addition to

outside tread wear, produces radial sidewall cracks, ply separation, loose or broken cords. On tubeless tires, it causes the bead to slip and wear, eventually destroys the bead's air sealing surface.

Small cuts that can't be repaired promptly should be trimmed. Cut away any flaps, give the cut sloping sides. This prevents sharp stones from being caught, working into and cutting the cord.

Also in your PM inspection, check valves to be sure they're holding, replace valve caps thus keeping valve clean, remove stones caught between duals to prevent cuts or chafing wear, clean oil and grease off tires, test tire gages for accurate reading.

In fact, it might pay you to hire a tire expert, or —at least—assign a man the job of being a tire "detective." Figure it out. How much tire wear does he have to eliminate before he's paying his own salary? Why, he might even show a profit!

IHC Develops

By W. W. Black, General Service Supervisor Construction Equip. Div., International Harvester Co.

Periodic maintenance programs have been around for a long time. Unfortunately, many are too complicated to be practical. Others lose their effectiveness because they are anchored to a maze of paper work.

International Harvester, after thorough investigation and testing, has developed a new system—"Scheduled Maintenance." It has the twin blessings of simplicity with a minimum of record keeping.

To implement this maintenance program, only three basic forms are needed. They are: The Operator's Shift Ticket; the Scheduled Maintenance Control Record; and the actual Inspection and Report sheets. Backbone of the system is the operator's ticket, as good maintenance must begin with the poerator.

The Operator's Shift Ticket is a operator at the end of his shift.

filled out by the operator at the end of his shift. It is a record of hours worked, final hour meter reading, loads handled and mention of any mechanical details requiring attention.

Practice of reporting small problems before they lead to major failures gives the operator a share of the responsibility for keeping his machine in prime condition. Systematic use of the shift ticket makes correction of minor problems no more than one shift away.

To take full advantage of the information contained in the Operator's Shift Ticket, it must be posted daily to the Scheduled Maintenance Control Record. This tells the MM or shop foreman the exact hour meter reading of the next maintenance inspection and enables him to forecast the approximate inspection date.

A blackboard is the favorite

method for controlling inspections. At a glance, these boards show the "due dates" of all inspections. Marking overdue inspections in red is an easy way of keeping maintenance men on their toes.

The actual Inspection and Record sheets are the final forms required to complete International Harvester's "Scheduled Maintenance" program. Listing the maintenance checks in a natural order minimizes starting and stopping the engine, eliminates extra leg work and lost motion.

"Scheduled Maintenance" Program

To simplify maintenance scheduling and record-keeping, paperwork involves only two forms and a blackboard. Here's how it works



And one of the beauties of this program is that only a bare minimum of writing is required. A check mark is used for an OK, and "R" for repairs, and an "O" for adjusted.

Same is true of the time factor. Only about two per cent of the normal available operating hours are needed to perform the necessary checks. If inspections are made after hours, no production time is lost at all.

The new IH Job Cost Records—although not actually part of the "Scheduled Maintenance" system—have a value that should not be overlooked. Accurate cost records are invaluable for job estimating, are also extremely useful at income tax time.

These forms make it an

effortless procedure to record fuel consumption and fuel expense, oil and grease requirements, working time compared with lubrication, maintenance, standby and downtime. Also included are production records and repair costs.

There's also a handy envelope for holding all the records for one machine. The outside of the envelope lists the special equipment on the unit, the lube and oil change periods, filter numbers and other information you need to have instantly available.

As already mentioned, periodic maintenance programs are nothing new in the construction equipment industry. Some call it "preventive maintenance."

Yet, some fleets have not been completely sold on the advantages of such programs. This is hard to understand since cost savings (always an attractive subject) and equipment performance and reliability are the only reasons for a "Scheduled Maintenance" program.

This program can virtually eliminate unexpected breakdowns. Consequently, shop overtime needed to get deadlined equipment back to work can be drastically cut. You'll also need fewer standby units to keep the job rolling.

Increased work output in the shop will be another benefit of scheduling maintenance work. The equipment superintendent, master mechanic, dirt foreman, and others, will be a healthier

and happier crew, with less frustration and fewer problems all along the line.

For the benefit of the "unconvinced," here is an actual example of "Scheduled" costs versus "Unscheduled" costs:

Average labor time for a 1000-hour inspection of a heavy-duty truck is 30 man-hours, or approximately \$75. If this is not done, and just one drive wheel planetary is lost, your "Unscheduled" costs could be:

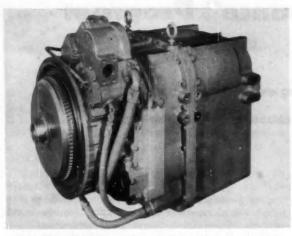
Down time\$	100
Bearing failure	40
Related parts(could run to \$3600)	1200
Labor, plus 50 per cent overtime labor	200
Total:	1,540

Plus-Lost production of dependent equipment.

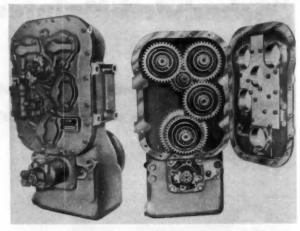
Should a pusher be lost for lack of maintenance on a three-scraper job, with each moving 150 yards of dirt at 38 cents per yard, four days' down time will cost \$7044. Add to this the parts, labor and overtime pay necessary to get the pusher back in action. Any contractor can readily appreciate that this is not the way to move dirt profitably.

Given a fair trial, Scheduled Maintenance's effect on your expense and production records will be a

resounding clincher.



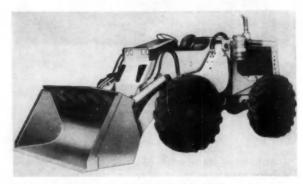
Twin Disc Clutch Co., Racine, Wis., is now offering a power-shift transmission for engines developing up to 420 net hp at 2100 rpm. The Model TA-51-2001 has five forward speeds and one reverse, is a straight-through countershaft type with constant mesh gearing and oil-cooled, hydraulically - actuated clutches. Optional gearing gives three forward and three reverse ratios. Circle 302 on the reply card to get more details.



Clark Equipment Co., Jackson, Mich., has also announced a new power-shift transmission in its 2000 Series. It's used with the Clark 270 torque converter on engines developing up to 200 lb ft of torque. Four hydraulic clutches power shift two speeds forward and reverse. Manual range selector gives four speeds in each direction. Unit is offered for either two or four-wheel drive applications. Circle 303 for more information.



Newest addition to Thew's line of Moto-Loader front end loaders is the Model ML-309. Made by the Thew Shovel Co., Lorain, Ohio, it has a 3 cu yd bucket with 9000 lb carrying capacity and 18,000 lb lifting capacity. Unit is powered by a Cummins 175 hp diesel, has a torque converter, planetary axles and power-shift transmission. Outstanding feature is the one-foot control of both forward and reverse travel and speed. This leaves the op-



erator's hands free for steering and bucket controls. More information? Just circle 304 on the reply card.

Billed as the largest production truck in the world is the Model 95-EDT KW-Dart dump trailer. Designed primarily for mining fleets, it's rated for 95 ton payloads, has a GCW rating of 310,000 lb. Unit is powered by a 700 hp V-12 diesel driving a 19-in. single-stage torque converter and a four-speed power-shift transmission with an oil brake. Rear axle is a triple reduction planetary type. For more details, circle 301 on the reply card.



Latest entry in its "Pacemaker" line of electric wheel earthmovers is this Series L-28 Electric Digger from R. G. LeTourneau, Inc., Longview, Tex. It's the first "small" machine in this class, has a rated capacity of 30 tons. Unit is powered by a 420 hp diesel-electric power plant driving all four electric wheels. Scraper is self-loading in many types of material. To get more information, just circle 300 on the reply card.





That SNOW must go

Chautauqua County, N. Y., fights blizzards with a fleet of precisely-controlled and radio-dispatched snow-fighters

"THAT SNOW MUST GO" is the winter slogan of many highway departments in the "snow belt." Snow removal gets top priority. It has to, just to keep roads open during big blizzards. Just as vital as the equipment itself is the control of it.

The Chautauqua County Highway Department, western-most county in New York State, has one of the finest and most efficient snow fighting control systems in the nation. It's an operation that keeps a pulse on every piece of equipment, is able to move trucks, sanders, plows, graders and allied equipment to a trouble spot on a minute's notice.

The County borders Lake Erie and is southwest of Buffalo, N. Y. It has responsibility for plowing 632 miles of State and County roads, also has to sand and salt 462 miles of these routes. Highway Dept. is headquartered in Falconer, N. Y., under the direction of Supt. Robert M. Howard, a 24-year veteran with the Department.

Chautauqua County Highway Department has the following snow-fighting equipment to do the job:

- 1 Walter 4-wheel drive.
- 3 Rotaries mounted on Oshkosh 4-wheel drive chassis. Two of the truck engines are Cummins diesels, one is gasoline powered. Two of the rotary power units are Cat D342 diesels and one is a Climax gasoline engine.

(TURN TO PAGE 152, PLEASE)

SHOP HINTS

10-

25

Send us a short description and photograph or simple sketch of the shop-made maintenance short cuts you are using. We'll pay \$10 and \$25 to those who submit good ideas.

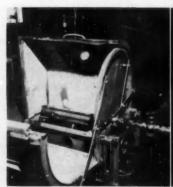
From Fred Johnigk, foreman, Automotive Dept., Keystone Steel & Wire Co., Peoria, Ill.

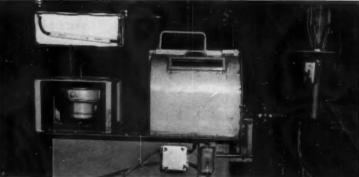
To check paper air filter elements we built this cleaner and tester. Three steps are involved. The 200-watt bulb mounted through a pipe has a ball bearing and plate underneath (upper right, left photo) which is used to rotate element around light to check for punctures or breaks.

The cleaner mounted on the stand has a light inside. The 2-part cover closes to make it air-tight, has an inspection window. Two ball-bearing-mounted tubes have handwheel at bottom, are adjustable for any size filter. Above, a smaller, lawn-sprinkler tube has ½-in. holes drilled ½ in. apart. A piece

of heater hose covers holes for shorter filters. Tubing slides on two rails to reverse direction to clean both sides of filter. Hole at bottom is inlet to an old vacuum cleaner which does the cleaning.

A vacuum tester (upper left, left photo) is made from a piece of %-in. I.D. glass tubing mounted over a ruler. At one end is a small plastic medicine bottle. At the other is a fuel filter. Under it is a vacuum cleaner motor with inlet coming up through filter. A 1-in. rubber disc at top of filter seals-out air. Vacuum gage shows how much air pulls through filter. Low reading means filter is clogged.





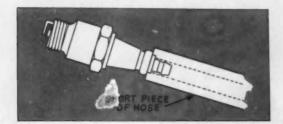
From the garage stockroom, Sealtest Dairies, Kansis City, Mo.

To keep gaskets from fluttering off their storage hooks, we use ordinary spring-type wooden clothespins. Gaskets and washers are stored on a 4 x 8-ft section of pegboard on the stockroom wall. The slightest air movement used to cause them to blow off the hooks, thus mixing them up and frequently damaging them. Now we clamp the pins to the hooks outside the lighter gaskets. They're jammed against the gaskets tight enough to keep them from fluttering and getting torn.



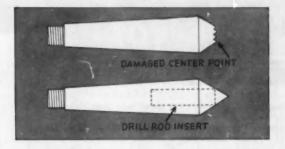
From Frank Bede, State Highway Maintenance Shop, Williston, N. D.

To install spark plugs in V-8's we use a short piece of hose. Often, the newer V-8 engines in both cars and trucks have the plugs "buried" so you can't even see them. Other times, they're right next to a hot exhaust manifold. We solved the installation problem by fitting the hose snugly over the spark plug. With this, you can get the plug started easily-avoid burnt knuckles.



From Ed Mayover, manager, Eddie's Gulf Service, Bradenton, Fla.

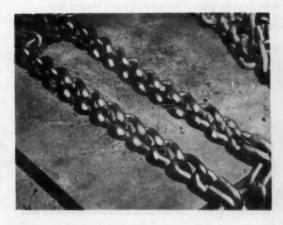
To repair damaged lathe centers here's a cheap and easy method. If you break or burn the center on your shop lathe, it's not always easy to get a new one. So, you can repair it yourself. First, anneal the lathe center and face it off just below the damaged portion. Then center-drill the point and drive-in a piece of drill rod. Grind it off to 60 deg. Finally, retemper the tip to its original hardness.

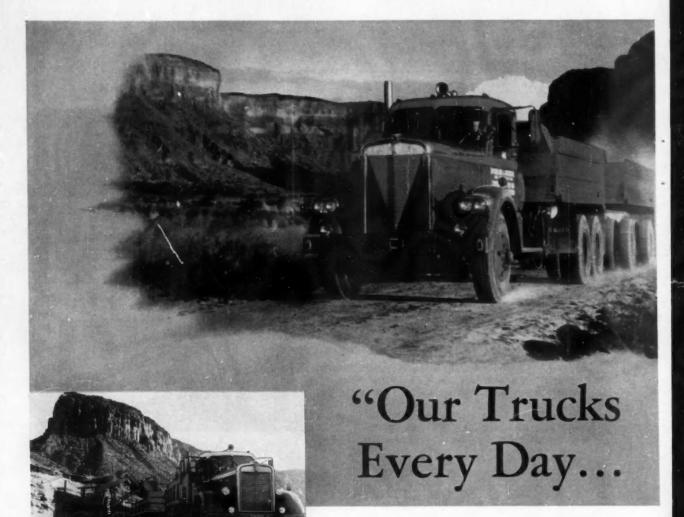


From the shops of the Goodrich Dairy Co., Omaha, Neb.

To boost tire chain life

try spot welding. When links are about halfway worn, have your welder give each link a heavy dab of hot metal from Rex-Arc 55 welding rods. This makes the links tougher than metal originally in them-doubles chain life. The job can be done fast with six or more links lined up on the welding bench. A welder can do an entire set in just a few minutes at 5 per cent of cost of replacing cross links with new ones.





Ratios of the Spicer 8045 4-speed main transmissions in these Kenworth trucks are so spaced that they are functionally split or compounded with the ratios of the Spicer 8341 4-speed auxiliary transmissions. This provides a gear ratio for every operating need—speed, torque, power and economy—in the rough, rugged ore hauling business in which McFarland & Hullinger are engaged. Benefits of this wide, flexible range of gear ratios are (1) bigger payloads can be hauled (2) more trips can be made (3) maintenance and operating cost is lower.



Arthur Corradini, superintendent of McFarland & Hullinger, uranium ore haulers, tells how Spicer main and auxiliary transmissions save time and money in hauls over rugged Western terrain.





Arthur Corradini, right, inspects Spicer 1700 Series universal joint after mechanic Lawrence Schaublino has pronounced it ready for many more thousands of miles.

Take A 'Mountain Beating' That's Why We Specify Spicer"

"Our rigs negotiate some of the steepest mountain roads in the country," says Mr. Corradini. "About 50% of our routes are over off-highway dirt and gravel roads. Temperatures range from 10° below zero to 105° above—at times, our trucks fight 8-foot-high snow drifts. Even when the roads are plowed we have to 'grind' over 18 jnches of packed snow!

"Our drivers drive these trucks over rough roads and up steep inclines seven days a week, two shifts a day. Each truck logs about 10,000 miles a month. Our fleet consists of 46 Kenworth trucks—and they're all equipped

with Spicer 4-speed main and Spicer 4-speed auxiliary transmissions. Clutches, by the way, are Spicer 14-inch 2-plate models. Universal joints are Spicer 1700 Series at the forward end and 1600 Series at the rear end.

"Why do we specify Spicer components for both original equipment and replacement? That's easy to explain. Their durability has enabled us to hold costly service trips down, and we can keep a small parts inventory because Spicer replacement parts are readily available everywhere we operate—Colorado, Utah, Arizona, Nevada, California and Wyoming."

SPECIFY SPICER for low operating cost, low maintenance cost, availability of replacement parts.

SERVING TRANSPORTATION—Transmissions • Auxiliaries • Universal Joints • Clutches • Propeller Shafts • Power Take-Offs • Torque Converters • Axies • Powr-Lok Differentials • Gear Boxes • Forgings • Stampings • Frames • Railway Drives



DARIA CORPORATION

Many of these products are manufactured in Canada by Hayes Steel Products Limited, Merritton, Ontario

COMMERCIAL CAR JOURNAL, February, 1961

More details? Circle 164 on reply card inside back cover



in trucks and tractors

It's easy to get more details about the items described.

Just fold out and use free reply cards inside back cover



Tandem-axle truck models just introduced by General Motors Corp., Truck & Coach Division, Pontiac, Mich., are construction-type vehicles especially tailored for dump, mixer and other building operations. New "WV" and "WA" series feature four models with conventional cabs and easy-to-service V-6 engines.

For further details, circle 306 on reply card



Trucks with 90-in. bumper-to-back-of-cab dimension give conventional-truck accessibility and interior cab spaciousness plus increased loadspace, says maker Kenworth Motor Truck Co., Seattle, Wash. The S-900 series can be used in the transit mix industry as highway dump trucks as well as for hauling 40-ft semis over the highway.

For more details, circle 307 on reply card

Two new gasoline-powered truck models are available from Diamond T Motor Truck Co., Chicago. The new gas jobs are said to be light in weight yet applicable to heavy-duty on and off-highway use. Models in the 4000 (2-axle) and 4300 (3-axle) series feature short-stroke, valve-in-head engines with wet-sleeve construction.

For more information, circle 308 on reply card



Gasoline-powered truck and tractor models just announced by White Motor Co., Cleveland, Ohio, are said to be heavy-duty vehicles with low operating and maintenance costs for special application. Tractor Model No. 4200TS (shown) is on 134-in. wheelbase, has 170-hp engine. Truck Model No. 4200S on 146-in. wheelbase has a 145-hp engine.

To get more details, circle 309 on reply card





Model No. C-100 truck has Bonus-Load pickup body



Model No. C-110 offers standard pickup body

Trucks in IHC's new line feature "low profile"

INTERNATIONAL HARVESTER Co. has just introduced a new line of light-duty trucks designated the C-line. The models offered are said to feature new "low profile" with overall height reductions of from three to five in., new exterior styling, longer wheelbases and a choice of new suspension systems and frames. Vehicles in the line have GVW's ranging from 4200 to 8800 lb, with wheelbase lengths from 122 to 140 in.

Truck bodies offered include pick-up, panel, stake, platform, dump and service-utility models. Also included is a new station wagon called the Travelall (shown here). The 4-door, 9-passenger wagon has a fold-down second seat and fold-down tailgate with electrically-operated window as Custom model standard equipment. There's a payload area of 124-cu ft behind the front seat.

Both 2-wheel and 4-wheel drive chassis are available in the line. Standard engine in all models is the



This Travelall 9-passenger station wagon is included in C-100 series

International V-266 V-8 rated at 155 hp. Valve-in-head 6-cyl engines with gasoline or LP-gas fuel systems are optional.

The C-100 series truck with 7-ft Bonus-Load pickup body (upper left photo) and the station wagon feature

For more details on IHC's C-line, circle 310 on reply card

torsion-bar front end suspension and welded box-section frames. C-110 (upper right), C-120 (lower left) and C-130 (lower right), series have I-beam front end suspension and channel steel frame.

Model No. C-120 Travelette is a 6-passenger, 4-door truck with pickup body. It's offered with either 2- or 4-wheel drive as standard. Other models have 2-wheel drive as standard with 4-wheel drive optional.

Model No. C-130 has 8800-lb GVW, offers a low-loading dump body as factory-mounted option.

Editor Bart Rawson reports from the press preview in Phoenix, Ariz., that the most impressive feature of IHC's new C-line is complete engine accessibility. Within 12 in. of front grille are radiator fill, dip stick, oil fill, distributor, coil and generator (including fan belt adjustment). Also of truly significant benefit to the maintenance man are locations of spark plugs, wiring harness, fuse

Travelette Model No. C-120 features six-man cab



Model No. C-130 has GVW rating up to 8800 lb



COMMERCIAL CAR JOURNAL, February, 1961

block and even windshield wiper motor—all within easy reach.

Scout is new, too

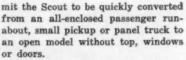
Another new addition to the International Harvester line of vehicles is the Scout. IHC says it's a small, all-purpose vehicle for transportation of both passengers and cargo. Offered in 2- or 4-wheel drive models, the Scout has an over-all length of 12 ft, 10 in. on 100-in. wheelbase.

It features a removable steel top, 5-ft-long pickup body with station wagon type tailgate, removable door glass and removable doors as standard equipment. Optional is a one-piece steel Travel-Top which encloses both



passenger compartment and pickup body to provide a station wagon look. These versatile design features per-

For more details on the IHC Scout, circle 311 on reply card



The 52-in.-wide front seat holds three passengers with additional seating provided on two full-length wheel housings in the pickup body.

A new International Comanche economy engine is standard on both 2- and 4-wheel drive models. The 152-cu in., 4-cyl, valve-in-head powerplant develops 90 hp at 4400 rpm. It's said to incorporate basic components of the International V304 8-cyl engine.

Both models have 10-in. clutch, 4.27 gear ratio rear axle, 3-speed synchromesh transmission and 12-volt electrical system.







White designs new Custom Cab

W HITE MOTOR CO., Cleveland, Ohio, says its new Custom Cab is designed with the driver in mind. Features are said to provide improved safety, comfort and visibility. The new cab is offered on White 9000 Series diesels with 90-in. BBC, 9000 Series V-8's with 96-in. BBC and 4400 Series diesels.

Constructed entirely of steel and fully-insulated, the Custom Cab is 72 in. wide at rear and 57 7/16 in. high. Important design features include:

For more details on the Custom Cab, circle 312 on reply card

- •Instruments grouped for clear view, instant reading.
- Easy-to-reach controls and switches.
- Brake and accelerator pedals located next to each other.
- Gearshift controls positioned to require less effort in shifting.
- Contoured driver's seat with separate back and seat adjustments and plenty of elbow room.
- Wide-angle windshield, large side and rear windows for unobstructed visibility.





They seat instantly

Both the chrome-faced top compression ring and the side rails of the stainless steel oil ring in the American Hammered Krome-Oil ring set are specially treated to seat instantly • The compression ring is pre-seated—a factory applied process equivalent to many hundreds of miles of actual engine operation • The chrome-facing on the oil ring side rails has a factory finish which imparts thousands of microscopic pockets which hold oil. This assures quick seating—instant oil control. American Hammered, Automotive Replacement Division, Sealed Power Corp., Muskegon, Michigan.

U.S. Pat. No. 2,789,872

AMERICAN HAMMERED



stainless steel oil rings

. VISIT OUR BOOTH NO. 2342-3-4-5 AT THE I.A.S.I. SHOW IN LOS ANGELES, FEBRUARY 17-19, 1961



in trailers

It's easy to get more details about the items described.

Just fold out and use free reply cards inside back cover



Platform trailers convert to open-top units with new interlocking aluminum panels made by Fruehauf Trailer Co., Detroit. Maker says the panels are interchangeable between its steel or aluminum platform trailers. Each panel can be removed without disturbing the adjoining rack. Lift-out rear doors are hinged to swing flush against sidewalls.

To get more details, circle 313 on reply card

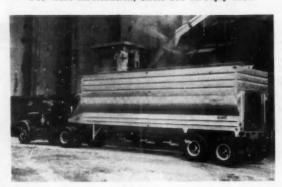


New furniture van just introduced by Dorsey Trailers, Inc., Elba, Ala., features built-in vertical post tie-down system as standard. The FVP Series is said to have 300 cu ft more loadspace than the previous 40-ft model. Side structure is of vertical posts on 24-in. centers, replacing combined verticals and X-bracing.

For further details, circle 314 on reply card

Enclosed hopper trailer announced by Gar Wood Industries, Wayne, Mich., incorporates maker's "Mono-Shell" design festure. The trailer shown is a high-cube grain unit. Body contours are said to provide needed strength, eliminate truss frames, longitudinals and cross frames. Result is lighter weight, bigger payload.

For more information, circle 315 on reply card

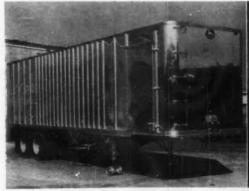


called "Stabilift" is from Challenge-Cook Bros. Inc., Los Angeles, Cal. It's made in single and 2-axle models with 18 to 30-ton capacities. For use in ordinary dump and fill work, stockpiling and spreading, it's also suited for working with asphalt and concrete paving machines.

If you want more details, circle 316 on reply card



COMMERCIAL CAR JOURNAL, February, 1961







Combination van and hopper type trailer is offered by Great Dane Trailers, Inc., Savannah, Ga. It's designed for double-duty use hauling bulk commodities one way, finished goods the other.

Roof of the unit has two loading hatches. To convert from van to hopper, a center post and cable are used to raise hinged floor sections. With supports provided, sections become bin walls. Bin angle gives proper load distribution. When trailer is used as cargo van, angle posts and ratchet

More details? Circle 317 on reply card

stops are stored in a compartment underneath. Front and rear doors permit use of all space with bin walls raised. Two hoppers have manuallyoperated butterfly discharge gates.

Interior and exterior finish is allaluminum. Payload capacity of the trailer is 36,000 lb.

Dual-pressure tank trailer

with 62,000-lb. payload capacity has just been announced by Fruehauf Trailer Co., Detroit. Four bottom hoppers in the single-compartment steel tank are said to successively unload such materials as cement, fertilizer, grain and various dry chemical products. Dual pressure involves a greater pressure of air being exerted from above while a lower pressure is exerted in the discharge line to move the product through the hose. The tank can be unloaded with either a tractor-mounted blower with PTO or a gasoline engine mounted on trailer to power the blower. The new unit is available in lengths from 32 to 35 ft.

To get more information, just circle 318 on reply card



THERE'S MORE

Dual-cargo trailer

hauls either dry or liquid products, permits two-way payload runs. It's offered by Standard Steel Works Inc., North Kansas City, Mo. The all-aluminum, 42-ft-long, 10-ft-high unit has 42,600-lb payload capacity.

A rectangular tank extends the full length of trailer with bottom sloping downward from each end toward center. Separated into four compartments, tank has overall capacity of 7250 gal.

More details? Circle 319 on reply card

Flat tank top serves as dry cargo area floor with 7-ft, 3-in. width. It's enclosed by 3-ft-high, removable end and sideboards and a hinged tailgate. Loadspace is 710 cu ft. Area depth may be increased to 5½ ft to utilize allowable trailer height of 12½ ft.







in trailers

Continue



Plastic truck tank

for hauling vinegar, alcohol and similar products has been developed by Beetle Plastics Corp., Fall River, Mass. Made of solid fiber polyester resin with no lining or coating, it's said to be corrosion resistant and leakproof. Insulation is not needed except in special applications.

More details? Circle 320 on reply card



Six-car transport

trailer is newly-designed by Confab Corp., Detroit, to be under 13 ft high when loaded. Built with tubular trusstype construction, it has one set of jumper skids and one set of hydraulics, instead of the usual two or three. Length is 37½ ft, empty weight is 9200 lb.

More details? Circle 321 on reply card



New bulk grease carrier

from Columbian Steel Tank Co., Kansas City, Mo., is a semi-trailer with three inside canisters. Each canister holds 10,500 lb, is unloaded from bottom by individual pump. Gasoline engine and hydraulic pump at trailer front provide power to operate the three unloading pumps.

More details? Circle 322 on reply card



in buses



Passenger transport bus for public use is the first of its kind to be produced by Wayne Bus Division, Divco-Wayne Corp., Richmond, Ind. The 38-passenger "Super Cruiser" is 34 ft, 7 in. long, has airplane reclining seats and a 6-passenger lounge compartment at rear. Forward section has several areas with swing-around seats and tables for conferences.

The new bus has 72-in.-long side windows and large, low-dip, 2295-sq in. windshield for better driver visibility and extra safety.

Center overhead interior lighting is supplemented by individual seat spotlights and a skylight over the rear lounge.

More details? Circle 323 on reply card

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in truck bodies

It's easy to get more details about the items described.

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Wrecker body

made by Ashton Equipment Co., Detroit, features a No. 10 Tulsa winch, reversible PTO, underdrive equipment and extension boom. The allsteel wrecker body is shown here mounted on a new 1961 Dodge 4-wheel drive chassis with 202-hp V-8 engine. The 133-in. wheelbase unit is said to be ideal for off-highway use and in severe weather conditions.

More details? Circle 324 on reply card



Insulating panels

are shown being built into a new type of lightweight milk truck body. Skagit Plastics Inc., LaConner, Wash., makes the panels of two sheets of fiber glass with an inner filling of Dylite expandable polystyrene. The new panels are said to be water resistant, easily cleaned and capable of keeping interior body temperature from five to 10 deg cooler.

More details? Circle 325 on reply card



New truck body

built like a trailer is offered by Fruehauf Trailer Co., Detroit. It incorporates design and components of the Volume-Van. The aluminum truck body is 96 in. wide and comes in lengths from 12 ft, 5 in. to 24 ft in 18-in. increments. It's available in either exterior post or smooth beaded panel design. Various door arrangements are offered.

More details? Circle 326 on reply card

Step-in refrigerated delivery body from Hunter Mfg. Co., Cleveland, Ohio, has matched overthe-road refrigerating and hold-over system. The compact, lightweight

the-road retrigerating and hold-over system. The compact, lightweight body comes in 8 or 10-ft lengths for one and 1½-ton chassis respectively. It's refrigerated by a Model No. C-5 Cargo Cooler with plate coil and hold-over plate. Unit is mounted on body front wall.

More details? Circle 327 on reply card

container hauling system called the Load-Lugger is a new addition to the line of The Heil Co., Milwaukee, Wis. The system consists of large detachable steel con-

sists of large detachable steel containers or bodies which are picked up, hauled and dumped by a truck equipped with the Load-Lugger hoist mechanism. One truck can serve many containers which handle scrap, dust, trash and other industrial waste.

More details? Circle 328 on reply card

Contractor-type body

is used for hauling brick, gravel and overburden as well as mined ore. The all-aluminum unit is heated and has 15.2-cu yd capacity. It incorporates 4400 lb of aluminum in its construction as compared to 7000 lb in similar steel units. Aircomatic welding is used in fabricating the body. The aluminum welding process was developed by Air Reduction Sales Co.

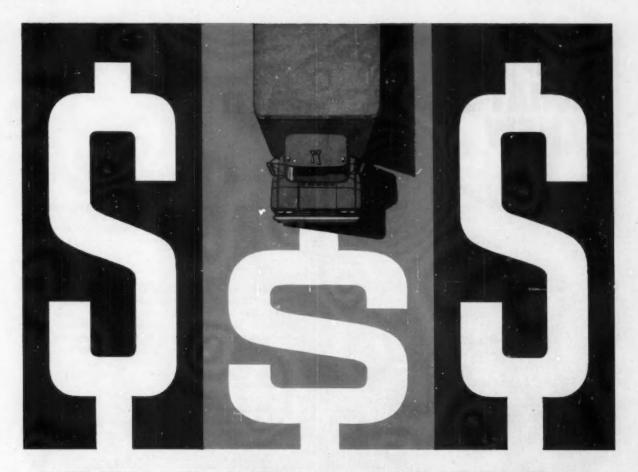
More details? Circle 329 on reply card







COMMERCIAL CAR JOURNAL, February, 1961



LOWER PRICE WITH BENDIX HYDROVAC® POWER BRAKES

Vacuum is the most popular power brake type by a big margin—and, among vacuum power brakes, Bendix Hydrovac is specified more often than all other makes combined. One big reason why over 5½ million Hydrovac units have

been sold is that they save money. They cost less to buy... less to maintain. Any way you look at it, whether you build, buy, sell, or operate trucks, you'll find it pays to specify Bendix Hydrovac—the best in power braking.



PROTECTION—Hydrovac furnishes maximum dependability—with built-in safety standby of manual braking in case of power failure.

PAYLOADS—Hydrovac weighs considerably less, permitting up to several hundred pounds more payload—and thus adding to profit.

More Bendix Hydrovac vacuum power brakes are in use than all other makes

Bendix PRODUCTS South Bend, IND.

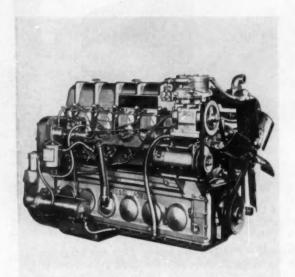




in engines

It's easy to get more details about the items described.

Just fold out and use free reply cards inside back cover



New diesel series

has been added to the P & H line produced by the Diesel Engine Division, Harnischfeger Corp., Crystal Lake, Ill. The new "Economy" engine series supplements the company's present "H" series. With the new 3-, 4- and 6-cyl models, the P & H line now includes a range of from 135 to 330-hp diesel engines. Shown here is the 6-cyl model in the "Economy" line. It's available in standard or turboblown type.

Features offered the fleet operator by the P & H line include:

 Light weight due to 2-cycle design and aluminumalloy construction. The 4-cyl, 220-hp engine weighs only 1480 lb.

Unitized power assembly and Roosa Master fuel system.

Compact design for installation in short cabs.
 Harnischfeger says the diesels have exceptional throttle response giving better pull on long grades and faster shifting.

Want more details? Just circle 344 on reply card



New six-cylinder truck engine from Ford Motor Co. is said to reduce operating costs by more than 12 per cent. The Big Six is a 262-cu in., 152-hp gasoline powerplant. It's available for Ford's F (conventional cab), B (school bus) and C (tilt cab) series.

Outstanding features claimed for the new engine by Ford are:

 Cast-aluminum pistons with cast-steel ring at upper ring groove, full-floating-type pins held by snap ring.

· Chrome-faced compression rings.

 Nickel-chrome alloy intake valves with "umbrella" seals for reduced oil consumption.

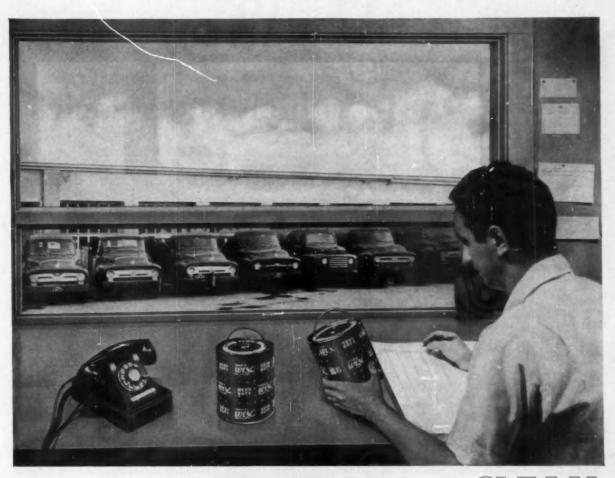
 Rotor-type oil pump for quieter operation and increased pressure.

 Oil pan rear baffle to deflect oil from rear seal so pressure won't force oil through it.

· Positive crankcase ventilation.

· Forged crankshaft.

To get more details, circle 345 on reply card



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There's a WIX Filter Cartridge designed for every gasoline or Diesel engine in fleet service... according to the job it's expected to do. Local delivery, over-the-road, high speed, off-highway, high or low temperatures—makes no difference when you install WIX—you get more job-time, less down-time.



Write, or ask your Jobber - find out how well you'll do with WIX.

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More details? Circle 168 on reply card inside back cover

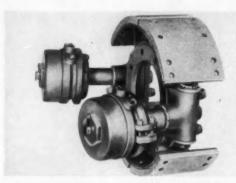
131



in vehicle accessories

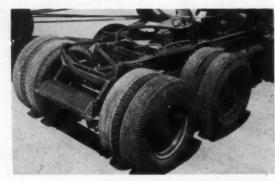
It's easy to get more details about the items described.

Just fold out and use free reply cards inside back cover



Truck and trailer brake called Stopmaster by Rockwell-Standard Corp., Ashtabula, Ohio, is said to allow standard use of 15-in. diameter brakes in most applications. Offered in widths from 2½ to 7 in., it can be air or hydraulically actuated. Design gives better cooling, uniform wear and longer drum and lining life.

For further details, circle 340 on reply card

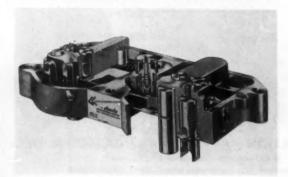


New retractable axle from Clement-Braswell, Inc., Minden, La., is said to convert any standard single-axle tractor into a tandemaxle unit. Installation is simple, says maker. The retractable axle can be regulated to carry from 5000 to 25,000 lb. Air-lift cylinders raise it from the road when it's lightly loaded or empty.

For more information, circle 341 on reply card

New-type engine brake for Cummins NH series diesels makes engine act as an air compressor. Speed is controlled by amount of engine resistance while it's pumping. Made by Clessie L. Cummins Div., Jacobs Mfg. Co., West Hartford, Conn., it's said to hold a 75,000-lb truck at 15 mph on a 10 per cent grade without use of service brakes.

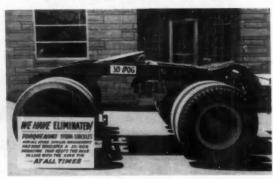
For further information, circle 342 on reply card



Detachable axle

built by Jo-Dog Mfg. Co., Bedford, Ind., hooks onto the fifth wheel of any standard single-axle tractor to convert it into a tandem. It has a 15-in. sliding kingpin with 10-in. adjustments at 1½-in. intervals. Said to increase payload up to 12,000 lb, it also has air brakes and telescoping dolly supports.

To get more details, circle 343 on reply card



Fuel inlet valve

just introduced by Holley Carburetor Co., Warren, Mich., is said to eliminate carburetor flooding caused by foreign particles in the fuel. The



valve tip is of DuPont Viton, a resilient material claimed to permit perfect sealing of valve and seat. More details? Circle 335 on reply card

Water separator filter for diesel engines is the Model No. I-500 from Filters, Inc., Milpitas, Cal. The fiberglass element is said to



separate even the most finely emulsified water droplets from the fuel. It may be installed on any stationary or moving engine as a final stage filter. More details? Circle 336 on reply card

Side racks for trucks and trailers save vehicle weight, cut down on maintenance, says maker Reader Properties, Inc., Los Angeles,



Cal. Construction permits plywood panels to slide into place with clamp-

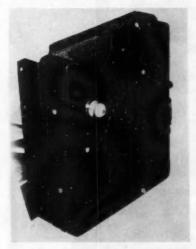
ing rod to keep them from moving. The side rack unit is said to be interchangeable between various truck and trailer bodies.

More details? Circle 337 on reply card

Three new heaters have just been introduced by Eaton Mfg. Co., Cleveland, Ohio. One is an economy model for passenger cars and light trucks which uses a fan to circulate warm air. It has 12,000 Btu per hour capacity and delivers 130 cfm.

More details? Circle 338 on reply card

Second is a parcel delivery truck heater (shown here) which can be panel mounted. A reversible motor



provides direct air delivery or indirect air discharge through top of heater over windshield for defrosting.

More details? Circle 339 on reply card

Third is a high-capacity, heavyduty utility heater for school buses and large delivery vehicles. Three discharge louvers rotate independently for air-discharge control in any desired pattern.

More details? Circle 400 on reply card

Electric refrigeration drive system for trucks is offered by Republic Electric & Development Co., Seattle, Wash. The Electro Freeze unit is said to provide simple, low-cost, dependable operation, with a 400-lb weight saving over comparable gas or propane engine drives. New system features a control unit which converts AC power from vehicle engine alternator into DC power for the compressor drive motor. Compressor drive is automatically controlled by a thermostat inside reefer body. The



in fleet services

Free filter survey is offered to fleet operators by Fram Corp., Providence, R. I. Oil, air and fuel filters are surveyed by Fram field men. Purpose is to help reduce fleet operating costs through systematized purchasing, inventory and selection of required filters, says Fram.

For each filter used, a weatherproof tag is attached to the equipment indicating the correct replacement cartridge. All equipment is then listed on special forms, either numerically or by group such as trucks, tractors, cars, etc. Included on the form are make, model, year, make of engine and makes and models of air, oil and fuel filters which were factory-installed.

Fram prints copies of the listings, inserts them into acetate folders and binds them into a booklet with a Fram catalog and cross references to all filters on the market. The booklets are given to the fleet's service superintendent.

More details? Circle 330 on reply card

Fuel and lube additive service is offered by Lubal, Inc., Columbus, Ohio, to help fleet operators reduce maintenance costs and increase engine efficiency. Lubal blends additives for gasoline, diesel fuel and lubricating oil to meet individual operating requirements.

More details? Circle 331 on reply card

Electro Freeze system offers a consistent basic driva for any size compressor, according to manufacturer.

More details? Circle 401 on reply card

School bus heater from South Wind Div., Stewart-Warner Corp., Chicago, is a new auxiliary combustion heater to add to standard school bus heating system. It's said to automatically keep coolant temperature at 155 to 180 deg F, operating only when engine is unable to maintain adequate heat in the cooling system. It's also said to speed engine warmup from a cold start and keep it at proper operating temperature even when idling. It may be



Mobile Electrical Products Display

AMP, Inc., Harrisburg, Pa., is using this Mobilab to tour electrical/electronic industries throughout the nation. The AMP Mobilab is a compact display that tells the AMP product and service story. The company's products include solderless terminals and electronic components.

KENDALL FLEET OILS

Shrink
Downtime
and
Repair
Costs





KENDALL F-L MOTOR OIL — Highly detergent-dispersant for heavy duty gasoline and diesel engines. Keeps engines clean and assures top performance in all fleet operations.

KENDALL SUPER-D MOTOR OIL
—Series 3. A heavy duty lubricant for high
output, supercharged diesel engines. Its
detergent-dispersancy gives maximum engine
cleanliness even when high sulfur content
fuels are used.

Both are refined from the richest 100% Pennsylvania Crude with advanced techniques to control harmful deposits and corrosion, inhibit rust and oxidation and lower oil consumption.

Ask your Kendall Distributor, or write

KENDALL REFINING COMPANY

BRADFORD, PENNA.

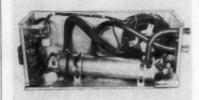
Lubrication Specialists since 1881



vehicle accessories

Continued from Page 133

mounted under the bus body, on either frame or floor. Combustion is inside a sealed, stainless steel chamber with outside exhaust discharge.



Bus electrical and fuel systems provide power and fuel. Heating capacity is 50,000 Btu per hour.

More details? Circle 402 on reply card

Metal for bus interiors called Rigid-tex is used for seat backs, interior lining below windows, and in the step well where it acts as

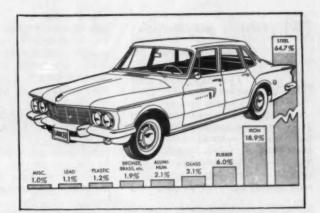


a scuff plate. Rigidized Metals Corp., Buffalo, N. Y., says it hides scratches and scuff marks, keeps new look without repainting or other upkeep. More details? Circle 403 on reply card

Transmission bearing seal called Seal-O-Matic is designed as a

By Weight, What is a Car Made Of?

According to a recent report, steel is still the major material in the modern car. It accounts for almost twothirds of the weight. This drawing of a Dodge Lancer shows percentages of other materials used in its construction.



replacement part. Maker, Better Part Specialties, Los Angeles, Cal., says it does away with driveshaft clunk, snap and whip, also protects against transmission oil leakage. Seal-O-Matic is a combination bearing and seal that's said to be easy to install to support shaft and hold it in perfect alignment. More details? Circle 404 on reply card

New service dashpot

from Holley Carburetor Co., Warren, Mich., is made of DuPont Delrin. The new chemical material is said to have high resistance to corrosion and



friction. Holley says the dashpot is practically universal for servicing Ford cars . . . replaces six steel dashpots now in use.

More details? Circle 405 on reply card

Reefer insulation

material called Cellofoam is produced by United States Mineral Wool Co., Stanhope, N. J. The low temperature insulation is a closed-cell, rigid, expanded polystyrene product. It's said to be moisture resistant and applicable for operating temperatures as lows as -60 deg. F.

More details? Circle 406 on reply card

TURN PAGE, THERE'S MORE

Toughest Lightweight on the Road!



THE LYN ALUMINUM TRUCK BODY

When you buy a LYN Body, you buy better performance . . . bigger payloads . . . longer life . . . lowest maintenance cost!

Here's why-

LYN all-aluminum construction reduces deadloadup to 40% . . . features siding beads designed on 4" centers—a strength advantage offered only by LYN.

.040 gauge aluminum roof skins—as much as twice as strong as other bodies—double lapped, guaranteed watertight.

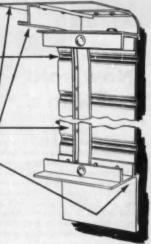
Heavy, extruded aluminum "Z" upright posts and cross pieces—no rolled sections—LYN bodies
CANNOT drum or balloon.

Beefed up extrusions at points of contact or stress.

Patented reinforced lock-tight riveted corner
castings—LYN bodies CANNOT rack!

All 4 rear corners are shaped and fitted at the factory—insures a square rear body and perfect fitting of doors.

LYN Standard Body Kits come in 9 lengths, 5 width and height combinations. Choice of BEADED panel, SMOOTH skin or EXTERIOR POST models.



Specify LYN bodies-toughest-lightest-most durable. See your LYN dealer, or write



LYNCOACH & TRUCK CO., INC.

Dept. C

Oneonta, N.Y.



vehicle accessories

Continued from Page 135

Two-way radio unit from Hammarlund Mfg. Co., New York City, is a single, universal unit, completely self-contained, that serves as both receiver and transmitter. The Outercom has controls mounted on front panel of cabinet. It operates on 6 or 12-volt vehicle battery or on 110-volt AC power supply.

More details? Circle 407 on reply card

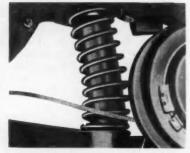
Wheel chock

just introduced by Bustin Steel Products, Dover, N. J., is said to have positive holding power for any large truck. It's made with "Protecto" safety grating to prevent skid.

More details? Circle 408 on reply card

Air springs

for compact cars have been developed by the Air Lift Co., Lansing, Mich. Units are available for installation inside rear coil springs of models so equipped. Other air lift springs come with their own coils for use on cars with leaf springs. These are installed between leaf spring and



frame. Air pressure in the springs is said to be adjustable to load requirements to provide level ride at all times.

More details? Circle 409 on reply card

Recording thermometer just announced by Ryan Recording Thermometer Co., Seattle, Wash., is a compact, portable unit. The Model D is said to give accurate, hour-byhour written records of temperatures

in transit for fleets hauling frozen



foods and perishables. Temperature recording range is from -20 to +100 deg F. The self-contained, springwound unit has a metal bracket to permit placement at any desired location in truck or trailer body.

More details? Circle 410 on reply card

Aluminum fuel tank said to weigh one-third as much as conventional steel tanks has been announced by The Hall Mfg. Co., Los Angeles, Cal. Maker offers a custom specification sheet for fleet operators



Here is a fuel pump that will outlast conventional pumps two to three times—is guaranteed up to two years or 60,000 miles of service. This is the boldest warranty ever to cover a fuel pump of any type. It is your assurance that the Tokheim pump will more than measure up to its claims of dependability. But it will do much more. Because this pump pushes fuel

electrically, from the tank to the engine, it stops vapor-lock, engine starvation and valve burn-out; improves performance, cold-weather starting, and permits continuous open-throttle driving. Thousands are serving all over the country—saving truck owners significant sums in downtime and engine repairs. We invite your inquiry.

Write for bulletin today!



to make conversion to new Alumi-Tanks easy. Tanks are made to same dimensions as original units for installation with existing brackets.

More details? Circle 411 on reply card

Smog eliminating device has been developed by Chromalloy Corp., New York City. The "Smog Burner" is designed to remove smogcausing hydrocarbon gases from automobile engines, says maker.

More details? Circle 412 on reply card

Spare brake which starts to function when any half of the hydraulic brake system



fails is now available from Mfg. Corp., Jamaica, N. Y. The SBD In-the-Line safety brake device is said to convert the brake system into a dual system . . . taking over automatically when brake failure occurs due to any leakage in the system. Power is maintained in the two wheels not affected by the failure.

More details? Circle 413 on reply card

Double-duty truck tire from B. F. Goodrich Tire Co., Akron, Ohio, is designed for positive traction in both forward and reverse gear. For on or off-highway vehicles, it features

(TURN TO NEXT PAGE, PLEASE)

to Every Shop Operator

 Diesel Compression Testers Mozzie Testers for Amer-

Bendix Hozzles

ican Bosch, Caterpillar and



More details? Circle 234 on reply card inside back cover



easier, faster and safer with versatile RUGER hydraulic cranes. Powerful and durable, these mobile cranes permit one man to pull or install engines, transmissions, differentials, saddle tanks, fifth wheels and other heavy parts or loads. And they can be used anywhere in any shop! That's why you can do more . . . save more . . . with RUGER cranes.

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1000 USES

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 Uhrichsville, Ohio 8615-RE More details? Circle 235 on reply card inside back cover

 Cummins Injector Tester International Harvester Injection Testers General Motors Injector Testers Injection Pump Calibrating Stands Nozzle-Injector Cleaning AUTOMOTIVE DIESEL ENGINES Tools and Lapping Blocks • Engine Overhaul Stands BULLETIN AD54 Engine Removal and Parts Dollies • GM 71 Engine Tools 76 Pages—275 Illustrations 56 Engine Reference Tables SEND COUPON 26 Parts Lists NOW BACHARACH INDUSTRIAL INSTRUMENT CO., 200 N. Braddock Ave., PGH., PA. Send us FREE copy of your Diesel Shop Manual AD54 ☐ Fleet Operators ☐ Injection Service Shop
☐ Parts and Engine Distributors Diesel Manufacturers NAME COMPANY STREET CITY and STATE AD-15 More details? Circle 236 on reply card inside back cover

COMMERCIAL CAR JOURNAL, February, 1961



vehicle accessories

Continued from Page 137

non-directional tread pattern for continuing traction in rough going through mud, snow or stones. The BFG All-Purpose Traction tire is available in either Tyrex or Nylon construction with choice of two tread designs.

More details? Circle 414 on reply card

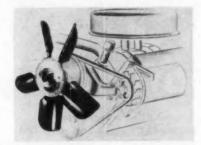
Mufflers

offered by Maremont Muffler Division, Chicago, now feature a special layer of aluminum, cadmium, lead and zincalloy coating. It's used to protect interior areas of the muffler against corrosion.

More details? Circle 415 on reply card

Fan drive kit

offered by Eaton Mfg. Co., Cleveland, Ohio, consists of a heavy-duty enginecooling fan and new Tempatrol thermostatically controlled fan drive. Unit is designed for most 1956 through 1961 American-made cars. Tempatrol is automatically regulated



by under-hood temperature to increase or decrease fan speed as required by operating conditions.

More details? Circle 416 on reply card

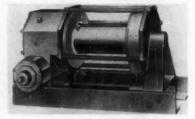
Electric windshield wiper is a heavy-duty, unitized model made by American Bosch Arma Corp., Springfield, Mass. It's called the "Twenty-Twenty" because of its capacity to operate a 20-in.-long arm



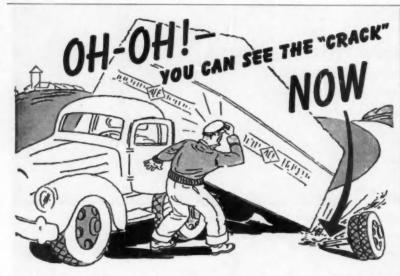
with 20-in. blade. It consists of an electric motor, mounting bracket and oscillating shaft with connecting drive linkage in one unitized as-

More details? Circle 417 on reply card

Heavy-duty power winch features torque transmission direct from gear spider to drum. Koenig Iron Works, Inc., Houston, Texas,



says the new principle completely eliminates the problem of key-shearing. It operates from a stationary



It Should Have Been Found During Overhaul BY INSPECTION with MAGNAFLUX - MAGNAGLO

Ordinarily invisible defects are located during routine preventive maintenance overhaul by simple inspection with MAGNA-FLUX-MAGNAGLO. When defective parts are not returned to service,—they don't fail in service.

Failures of crankshafts, blocks, spindles and axles (like that above) do not occur on your equipment after overhaul, if you are using inspection with MAGNAFLUX-MAGNAGLO during rebuilding of engines and units.



FATIGUE CRACK—in truck axle is invisible to the naked eye, but shows clearly with eccurate Magnatlux inspection to prevent breakdown.



FLUORESCENT Magnaglo indication, as seen on crank throw during inspection. This glowing line marks a non-visible crack very near to final failure.



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Inspection with Magnaflux is available to you through nationwide Magnaflux-authorized overhaul shops as well as Magnaflux' own Jaboratories. Write us for the location of shop no..rest you.

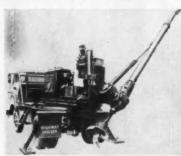
MAGNAFLUX CORPORATION

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New York 36 • Pittsburgh 36 • Claveland 15 • Detroit 11 • Dallas 35 •
Los Angeles 22

shaft with direct torque transmission by means of a multiple-splined collar in the gear housing.

More details? Circle 418 on reply card

Hydraulic earth-boring machine for digging holes up-to 42 in. in diameter and 35 ft deep has just been announced by Highway Trailer Industries, Inc. The "HCBMS"



digger has all-way hydraulic or mechanical power leveling. Controls are said to be easily accessible from a full-swing swivel seat. It's for installation on standard truck bodies.

More details? Circle 419 on reply card

Engine warmup device called Auto-Climatrol is now available from GorDag Industries, Inc., Minneapolis, Minn. Device fits under dash, requires no outside power. It's



said to act like a home heating thermostat, starting and stopping auto engine to regulate heat when vehicle is standing idle. GorDag says the device is tamperproof . . . car can't be moved without keys.

More details? Circle 420 on reply card

Torsion loader for Chevrolet and GMC trucks, permits normal operation of front torsion suspension under excessive loads. Tuthill Spring Co., Momence, Ill., says the Cambria torsion loader allows hauling of up to 6250 extra pounds safely.

More details? Circle 421 on reply card

by operating only during transmission, not during standby periods, according to RCA.

More details? Circle 422 on reply card

Torsion bars

for Chrysler- made cars are built to original equipment specifications by Thompson Ramo Wooldridge, Inc., Cleveland, Ohio. Maker says they're made to take more stress and strain at anchor points.

More details? Circle 423 on reply card









Get more miles per mill with J-M Brake Blocks!

Every time one of your drivers puts a foot on the brakes, it costs you money.

In figuring cost-per-mile, each stop amounts to just a few mills. But those mills soon amount to dollars. J-M Brake Blocks are built with a "bonus" of thousands of miles of extra wear and thousands of safe, extra stops. This longer, more dependable service life results from more than 50 years of Johns-Manville skill in the compounding, moulding and press-curing of friction materials.

J-M Brake Blocks deliver uniform friction balance on all four wheels, regardless of weight loading, temperature or moisture conditions. They maintain a stable friction level... recover fast. They end problems of glazing, scoring, and heat checking of brake drums.

Many fleet owners are already pocketing the profitable "bonus" that is built into every set of J-M Brake Blocks. Are you?

J-M BRAKE BLOCKS OFFER OTHER ADVANTAGES, TOO:



COLOR-CODED FOR EASY IDENTIFICATION

Style No. 2500 RED

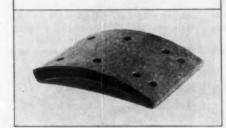
-high friction range for Trucks

Style No. 2300 YELLOW

-medium friction range for Buses

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—low friction range for longest life



COLOR CODING — Every J-M Brake Block is color-coded to eliminate possible installation errors. Simply by following the color-coding chart for each vehicle, your mechanics get the right blocks to the right spot in a hurry.

ADVISORY SERVICE —To help you get the most from your brake blocks, J-M offers a free Brake Advisory Service. A J-M expert will survey your fleet, and recommend the exact friction, or combination of fric tions, with the precise friction level needed for optimum performance at minimum cost.

AVAILABILITY—Whenever you need brake blocks, you can count on getting them fast from Johns-Manville. Just call your J-M Distributor. Full information from Johns-Manville, Brake Advisory Service, Box 14, New York 16, N. Y. In Canada: Port Credit, Ontario. Cable address: Johnmanvil.

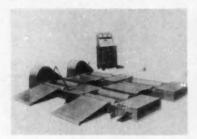
JM JOHNS-MANVILLE



in shop equipment

It's easy to get more details about the items described.

Just fold out and use free reply cards inside back cover



Chassis dynamometers in a new CT series from Clayton Mfg. Co. are offered in eight basic models. There are four single-axle and four twin-axle units to handle 150 to 800-hp trucks in all weight ranges. Dynamometer design and interchangeable components permit capacity of any model to be increased, when needed.

More details? Circle 424 on reply card



Brake tester just announced by McCormick Engineering Co., El Monte, Cal., is said to accurately indicate speed of vehicle when brakes are applied and the number of feet traveled in bringing it to a full stop. The Hetzel brake tester is clamped to truck fender or running board with contact clamp attached to brake pedal.

More details? Circle 425 on reply card

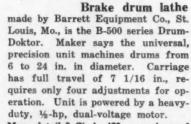


Center and end bushings on Hendrickson tandems can be serviced without removing tires or wheels with a new truck equalizing-beam service press, says maker Owatonna Tool Co., Owatonna, Minn. The hydraulic press has special adapters for removing and installing the bushings without removing the beam from the truck.

More details? Circle 426 on reply card

Hydraulic transmission from Roberts Electric Co., Chicago, is said to provide variable speeds from 0 to 1600 rpm. The 10-hp, variable speed transmission is for such heavy-duty applications as lifts and hoists, test racks, machine tool drives, compressors and pumps. The compact, lightweight unit is said to have smooth constant speed.

More details? Circle 427 on reply card



More details? Circle 428 on reply card



More details? Circle 429 on reply card









Tank sprayer

from DuBois Chemicals, Inc., Cincinnati, Ohio, is called the Jumbo Du-Zolver. The new cleaning apparatus holds 10 gal of detergent and mixes it at predetermined concentration into hot water pressure lines. It produces up to 1600 gal of cleaning solution. Wheels and handle permit use wherever needed to spray-clean equipment, walls and floors.

More details? Circle 430 on reply card



Air-operated end lift

called Sav-T-Jack features a twostage lift. First stage is up to 43 in., second stage to 63 in., with overall lifting range from 11/2 to 63 in. Maker, Sav-T-Engineering Co., Inglewood, Cal., says it handles all cars and flatbed trucks up to 5000 lb. Adapters are available for wide frame and compact vehicles. Bumperbracket lift won't damage bumpers. More details? Circle 431 on reply card



New bead breaker

and tire changer permits one man to change a truck tire in three minutes, says maker Tomorrow Products, Inc., Denver, Colo. The Saf-way bead breaker incorporates two pneumatically-operated pressure shoes that free both tire beads at once, with tire in upright position. It's said to be quickly adjusted to handle any size truck tire.

More details? Circle 432 on reply card

THERE'S MORE

Engine testing unit called the Master Analyzer combines five testing components into one console. Offered by Snap-on Tools Corp., Kenosha, Wis., the outfit includes the company's engine Anal-O-Scope, ignition analyzer, generator regulator, tach-dwell meter and vacuum/fuel pump pressure gage. Maker says the combination tester provides faster, more accurate work.

More details? Circle 433 on reply card

Tire changer designated the Model No. 881-AB by Bishman Mfg. Co., Osseo, Minn., is a new compact unit. Both air-powered bead breaker and air-powered wheel chuck are operated by the same air cylinder. Tires are mounted and demounted manually. Maker says no permanent air line connection is required because air is applied by a regular air chuck.

More details? Circle 434 on reply card

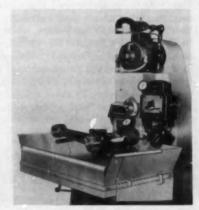
Honing machine

for rod reconditioning and pin fitting is a new model just introduced by Sunnen Products Co., St. Louis, Mo. It features V-belt double reduction spindle drive for greater pulling power of the spindle. Wider selection of speeds includes six from 200 to 640 rpm. It's said to handle large truck and diesel as well as passenger car rods.

More details? Circle 435 on reply card







COMMERCIAL CAR JOURNAL, February, 1961



in shop equipment

Engine tune-up kit from Kal-Equip Co., Otsego, Mich., includes the company's entire line of hand-held automotive tune-up tools. The Model No. 500 "Tune-Master" is housed in a white-enameled, roll-away stand and is said to perform all steps in complete engine analysis.

More details? Circle 436 on reply card

Cold-tank stripper called Stripzit is said to be a heavy-duty, single-phase stripper designed to strip the hardest and toughest deposits from all metals including aluminum and magnesium. Sea-Air Chemical Corp., Long Island City, N. Y., says it's completely safe on all metals.

More details? Circle 437 on reply card

Tire chain tool

designed to speed-up and simplify installation and removal of tire chains is just introduced by Autocraft Products, Kansas City, Mo. The cast alu-

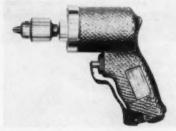


minum-alloy tool is said to make proper chain adjustment an easy job every time.

More details? Circle 438 on reply card

Sander-drill

from Superior Pneumatic & Mfg., Inc., Cleveland, Ohio, is a ¼-hp, airoperated unit. The dual-purpose Model No. SP-1800 is all aluminum,



weighs only three lb and measures 7½ in. overall length. Operated as a sander, it uses standard 4-in. discs or buffers. As a drill, it uses standard drill up to ¼ in.

More details? Circle 439 on reply card

Garage-light reel provides light and also offers an additional power source. The new Cordomatic Model No.600W reel locks



and releases with fingertip control at any desired cord length up to 20 ft. More details? Circle 440 on reply card

NOW...

The 52 snap-ring sizes you need most in one K-D Pak

- No more frantic searches
- No more trips or phone calls for one or two rings

How many times have you hunted all over the shop for a single snap-ring to finish a job-and ended up making many phone calls to get it? All this time and effort for an essential 2¢ item means real money out of your pocket and unhappy customers too. Now you can get the 52 most needed sizes of snap-rings for automotive and small engine service in a single box. With the K-D No. 985 Emergency Pak, you make on-the-spot ring replacements-eliminate all that searching, all that wasted time. What's more, when you decide what size you use most often, you can match it to K-D's handy sizing sheet in every Pak and get an envelope of just that size so you never run short. Look for both the Emergency Pak and the one-size envelope at your local jobber todaythey're on the K-D rack.





Snap-Ring Pilets Too. One for external rings, one for internal rings with 9 pairs of non-slip interchangeable points. Available as #444 set or individually.

Make Hard Jobs Easy

K-D MANUFACTURING COMPANY

Lancaster, Pa.

BUY BONDS

"THE HONEYCUTT TIRE REGROOVER GIVES S APPROXIMATELY 35,000 ADDITIONAL MILES

US APPROXIMATELY 35,000 ADDITIONAL MILES PER TRUCK TIRE ... BEFORE EACH RE-CAP!"

IRVIN SMART, vice president Robertson Transport Company can add 35,000 miles to each truck tire before each recapping. When they become slick, regroove them with the HONEYCUTT TIRE REGROOVER and drive them 35,000 miles or more before recapping. The HONEYCUTT REGROOVER regrooves tires right on trucks. Cuts any pattern. Takes only a few minutes. Reduces down time and driver idle time. Produces better forward traction and safer stops. Reduces jack-infing. Regrooving once around a rig will pay fer HONEYCUTT REGROOVER. Write, call or wire HONEYCUTT TOOL COMPANY 315 Austin Street / CA 4-1997 / Houston 2, Texas (Agents wanted in some areas)

More details? Circle 259 on reply card

More details? Circle 269 on reply card



space-saving doors FOR TRUCKS OR ANY OPENING plus longer lo



The KINNEAR Mir. Co. 2100-20 Fields Ave. Columbus 16, Ohio

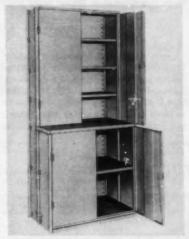
More details? Circle 267 on reply card



More details? Circle 268 on reply card

Steel shelving

is a new closed ledge-type just announced by Penco Division, Alan Wood Steel Co., Oaks, Pa. Units in

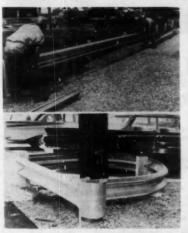


the 7-T series are 36 in. wide, 89 in. high, have waist-high 12-in. deep ledge.

More details? Circle 441 on reply card

Light-gage guardrail

for off-highway use is called Econo-Armco Drainage & Metal Beam. Middletown, Ohio, Products, Inc.,



offers the deep-beam guardrail for parking lots and inside-plant protection. It comes in 121/2 or 25-ft lengths. More details? Circle 442 on reply card

Repair patches

for tubeless tire and tube repair can be stored in a new compact cabinet from Ace Rubber Co., Dallas, Texas. Model No. 248 cabinet comes with full assortment of 200 Ace Chembond (TURN TO NEXT PAGE, PLEASE)

Thousands Save on Truck and Tractor Maintenance with **Almasol Gear Lubricants**

The same ALMASOL Wear-Arresting Agent which originally helped solve problems of high surface temperatures, extreme pressures, and acid corrosion on supersonic jets and space-conquering rockets is now providing new dimensions of protection for heavy equipment.

Transmissions and differentials on trucks, tractors and other heavy duty work equipment are critical areas. Here loads are heaviest ... heat at maximum . . . failures costly . downtime lengthy.

Mass-produced automotive gear oil cannot handle the ex-treme conditions of pay-loaded equipment.

ALMASOL 607-608 Gear Lubricants are advanced products which have demonstrated time after time their ability to reduce frictional heat from 50° to 80° F. in heavy 'work horse" fleets. The Almasol supplemental lubrication creates a friction inhibiting surface on gears and bearings, and protects against acid pitting.

ALMASOL provides a margin of protection far beyond the realm of ordinary gear oil. The Almasol film "takes over" when overheating or overloading creates conditions which would cause oil alone to fail.

FREE LITERATURE

We would welcome the opportunity to send you informative brochures discussing how LE's exclusive patented ALMASOL Gear Lubricants can increase your operating efficiency and save you money on maintenance costs - just as it has for thousands of other heavy equipment owners.

WRITE, WIRE OR PHONE DEPT. CCI-1

E L	LUBRICATION ENGINEERS INC.
Custom (Fort Worth 11, Texas
FIRM	
CITY	

More details? Circle 260 on reply card



shop equipment

Continued from Page 145

pipe or bushing size, says maker. Walker Mfg. Co., Racine, Wis., makes the tool for reshaping exhaust pipes and muffler bushings.

More details? Circle 444 on reply card

adhesive. It's available in 14 colors, in widths from 1/4 to 3 in.

More details? Circle 445 on reply card

chemical repair patches in four sizes, cement and handy buffer stitcher. More details? Circle 443 on reply card

Pipe shaping tool

called Spee-D-Shape features tapered design for easy shaping regardless of

Colored plastic masking tape for many uses in the trucking industry is made by Arno Adhesive Tapes, Inc., Michigan City, Ind. The new C-320 colored plastic tape is said to have thin, high-stretch vinyl backing and high-hold pressure-sensitive

Tire changer just introduced by Coats Co., Fort Dodge, Iowa, is air-powered. A new type of air converter is used to re-



place the usual piston or cylinder. The Bell-Aire tire changer handles all passenger car and light truck tires. More details? Circle 446 on reply card

designed to handle various items or

parts has a writing table and sta-

tionery rack welded to the frame. It's

Shop truck

ALABAMA Scott's Brake & Safety Service, Montgomery

ARIZONA Sales Co., Phoenix ARKANSAS Truck Equipm

Fruce, Equipment Co., Pt. Smith
Charles W. Carter Co., Los Angeles
Halfs Auto Electric Service, Monroo
M & M. Truck Parts, Inc., Maywood
H. G. Makelim Co., San Francisco
Moly & Van Dyke, Inc., Redding
Patterson Parts, Inc., San Francisco
Santa Rosa Auto Parts, Santa Rosa
Sneedo, Tarch Service, Los Anneles
Conedo, Tarch Service, Los Anneles Speedo-Tach Service, Los Angeles Yerby Brake Supply, Sacramento

nent Co., Ft. Smith

COLORADO Quinn & McGill Motor Supply Co., Denver Speedo-Tach Service, Inc., Denver CONNECTICUT H. G. Davis & Co., Bridgeport DELAWARE Brake & Equipment Co., Wilmington

FLORIDA Power Brake & Equipment Co., Miami GEORGIA Wheels & Brakes, Inc., Atlanta

HAWAII Charles W. Carter Co., Honolulu IDAHO Magneto Service Co., Blackfoot

ILLINOIS Illinois Auto Electric Co., Chicago National Auto Supplies, East St. Louis National Ignition Co., Chicago Windshield Wiper Service Co., Chicago

INDIANA Moore Equipment Co., Michigan City Moutoux Auto & Machine, Evansville

Muncie Reclamation & Supply Co., Muncie Truck & Bus Supply Co., Indianapolis

B & G Automotive Parts, Dubuque Richard Polton Co., Cedar Rapids KENTUCKY

A-C Brake Company, Inc., Louisville LOUISIANA

Pneumatic Devices, Inc., New Orleans MARYLAND

Air Brakes & Controls, Inc., Baltimore John Trumpy & Sons, Annapolis MASSACHUSETTS

G. Davis Company, Cambridge MICHIGAN General Parts & Service, Lansing

Gersonde Equipment
Co., Benton Harbor

Grand Rapids Brake
Service, Grand Rapids

Kramer & Keller
Brake Co., Grand Rapids
Parsons Brake Service, Battle Creek
Saginaw Truck & Equipment, Saginaw
Scientific Brake
& Equipment, Saginaw

MINNESOTA Power Brake & Equip., Inc., St. Paul Terrace Auto Supply, Inc., St. Paul MISSISSIPPI

Moel's Auto Electric Co., Jackson

MISSOURI Bill's Speedometer Service, St. Louis The B-W Brake Co., Kansas City The Ross Company, St. Louis

MONTANA Northwestern Auto Supply Co., Billings NEBRASKA Carl A. Anderson, Inc., Omaha

MEYADA General Equipment Co., Reno

Automotive Ignition Co., Pittsburgh Ed Chadderton Service, Sharon Hall-Scott Motors Co., Upper Darby

PENNSYLVANIA Allentows Pro-

Philadelphia Speedometer Service, Philadelphia Safety Sales & Service, Harrisburg United Equipment Co., Philadelphia

entown Brake & Wheel Service, Allentown



there's a Sprague AIR-Pusas Windshield Wiper Distributor nearby, ready to serve you!

NEW JERSEY Holst Bearing Co., Orange Tire Trading Co., Newark NEW YORK The Automotive

Appliance Center, New York Ehrlich Electric Service, Inc., Troy Wheels, Inc., Albany E. A. Wildermuth, Inc., Brooklyn H. W. Wolcott & Co., Inc., Buffalo

NORTH CAROLINA NORTH CAROLINA
Airport Electric Co., Greensboro
Brake Center, Inc., Winston-Salem
Brake & Flectric Co., Wilmington
Brown Equipment
Mrg. Co., Charlotte
Transportation Supply Corp., Charlotte
United Equipment & Service, Charlotte

United Equipment & Service, United Equipment & Service Co., Columbus.

Air Brake Service Co., Columbus.

Cramer Deluxe Sales, Akron

The Gerstenslager Co., Wooster

Hall Ignition Co., Cincinnati

Hancock Diesel Service, Findlay

Motor Rim Mg. Co., Cleveland

Rim & Wheel Service, Cincinnati

OKLAHOMA Dale George Co., Oklahoma City DREGON

Moty & Vandyke, Inc., Bend Roberts Motor Co., Portland

SOUTH CAROLINA Davis Auto Parts, Greenville SOUTH DAKOTA Godfrey Brake Servi & Supply, Rapid City
L & L Motor Supply, Yankton

TENNESSEE Dealers Truckstell Sales, Inc., Memphis Safety Service Co., Nashville

Sarety Service Co., Residential
TEXAS
Ace Brake Service, San Antonio
Astro Machine
Products Co., Grand Prairie
Bus & Truck Supply Co., Dallas
Dal-Tran Service Co., Dellas
Fleet Equipment Co., Dellas
Galveston Fleet
Service. Inc., Galveston

Service, Inc., Galveston Truck Parts

& Equipment, Inc., Houston
Yearby Battery Co., Laredo

HATU Automotive Service, Salt Lake City Intermountain Motor Service Co., Salt Lake City

VIRGINIA
Dixie Wheel Company, Richmond
Transportation Corporation
of America, Arlington

WASHINGTON Motor Parts Machine Co., Seattle WEST VIRGINIA Power Brake, Wheel WISCONSIN Brake & Equipment Co., Milwaukee Olson Trailer & Body Builders, Green Bay offered by Palmer-Shile Co., Detroit, has overall height of 50 in. Shelves are 38 x 20 in. wide. More details? Circle 447 on reply card

Wireless exhaust hose called Nu-Flex is made of neoprene by Car-Mon Products Co., Chicago. Said to withstand severe cold and heat up to 400 deg F without stiffening, kinking or cracking, it retains



original shape under pressure. It comes in 10-ft connecting sections, in 2, 2½ and 3-in. diameters.

More details? Circle 448 on reply card

Springfield, Ill., makes the 150-lb Model No. EC-118 stands for use singly or with lift.

More details? Circle 451 on reply card

Ignition cable tester
gives direct-reading measurements of
automotive ignition lead condition

Battery charger just announced by Twentieth Century Mfg. Co., Minneapolis, Minn., is said to be low in cost. The self-contained Model No. 141-1 is a 110-volt charger for either fast or slow charging of 6, 8 or 12-volt batteries.

More details? Circle 452 on reply card

Plastic filler

and cream hardener called Magic Bond is now available from Magic Iron Cement Co., Cleveland, Ohio. The polyester resin substance is said to adhere firmly to metal, wood, plastic and other materials.

More details? Circle 453 on reply card

Compact tire spreader added to the line of May Brothers Mfg. Co., Taylor, Mich., is called the (TURN TO NEXT PAGE, PLEASE)



Ashtabula, Ohio. The portable unit is said to be factory-calibrated for use on American-made cars and trucks since 1955.

More details? Circle 449 on reply card

for ice and snow control is a new

compact model called the Safety Spreader. Baughman Mfg. Co., Jer-

Pull-type spreader

New Complete
Welding-Cutting
Outfit...
COMES IN RUGGED
TOOL BOX

FULL SIZE!
TOP QUALITY!
LOW COST!

MARQUETTE Star Jet REDI-PAC

CONTAINS 1 Star-Jet Torch handle, 1 Cutting Assembly with tip, full-size oxygen and full-size acetylene gas regulators, 25 ft. double line hose, welding goggles, tip cleaner kit, torch lighter, combination wrench, Redi-Pac Tool Box.

FEATURES efficient "long-cone" flame from heat resistant solid copper alloy tips..."O" ring seals for full tip rotation without removing tips... large fluted aluminum swivel nut to protect "O" rings and threads . . . strong, light, sure-grip aluminum alloy handle.

FULL SIZE REGULATORS — nothing is "scaled down" in this complete outfit. Regulators fit all standard tank connections. Easy-to-read gauges.

USE IT FOR any welding, heating, brazing, soldering, or cutting job. Low operating cost. With this one outfit in its heavy duty mechanic's tool box you'll be fully equipped, no extras to buy.



tional maneuverability for use in confined areas. A belt conveyor powered by a wheel-mounted sprocket is used to empty the body.

More details? Circle 450 on reply card



14-PIECE OUTFIT ONLY \$11995 (reg. \$157.75 value)

You save \$37.80 over the item-by-item price for this complete outfit—the equipment that's first choice with repair and maintenance shops! So don't delay—call your MARQUETTE Distributor for your complete, modern cutting and welding outfit . . . the MARQUETTE Star-Jet Redi-Pac.

Service stands

for heavy truck and bus servicing adjust from 62¼ to 70 in. high. Ushaped saddles on top of adjusting screws are said to prevent vehicle slippage. Weaver Mfg. Division,

MARQUETTE

MARQUETTE MANUFACTURING CO. DIVISION OF MARQUETTE CORPORATION 307 East Heanepin Are., Minneapells 14, Minn.

More details? Circle 179 on reply card inside back cover



Peanuts Characters @ 1950 United Feature Syndicate, Inc.

Sure does, Linus! And every day more fleet owners are discovering how well Falcon saves. Not just on gas mileage, either . . . in every way! Falcon goes 4,000 miles between oil changes. Replacement parts, tires and service cost less everywhere. In most states even licensing and insurance cost less. All this at a price that's as much as \$505* less than other compacts. No wonder Falcon is America's best-selling compact! See it at your Ford Dealer's. Soon! FORD DEADLON, STORM MICHOEL STORM PRINTED TO STORM MICHOEL STORM PRINTED TO STORM PRINTED TO

*Based on a similar comparison of deluxe 4-door sedans with radio, heater and automatic transmission

THE FLEET CAR THAT SAVES YOU MORE





in shop equipment

Continued from Page 147

Model No. 101. It handles all light truck and passenger car tires. Unit is made to fit on top of all May Model No. 62 and 58 Series tire changers. More details? Circle 454 on reply card

Tire changer now available from May Brothers Mfg. Co., Taylor, Mich., is the Model No. 77. It's designed to handle all domestic and foreign-made passenger



car wheels from 12 through 17 in., with or without center holes. The airpowered unit is equipped with the May "Quick-Switch" mounting and demounting bar.

More details? Circle 455 on reply card

Vacuum cleaner is for use on all B-700 and B-900 series Drum-Doktor brake drum lathes and bench model brake shoe grinders



made by Barrett Equipment Co., St. Louis, Mo. The compact, tank-type unit can be mounted on lathe or grinder to collect dust and chips. It can also be used for regular shop cleanup.

More details? Circle 456 on reply card

Air-wrench

made by Chicago Pneumatic Tool Co., New York City, features a new, fastacting Dyna-Pact impact unit for



faster job output, says maker. The Model No. CP-734 impact wrench has \%-in. square drive.

More details? Circle 457 on reply card

Two-way radio line from Motorola now includes a new table top unit called the Consolette. Said to weigh less than 40 lb, the new unit is 15 in. long, 18 in. wide and 9 in. high.

More details? Circle 458 on reply card

Lubricant

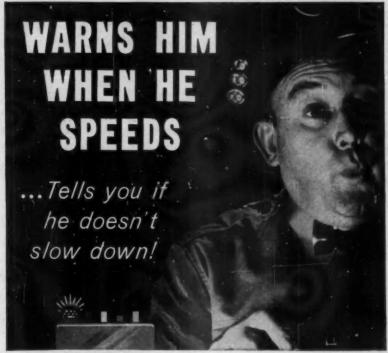
called Dri Slide consists of molybdenum disulfide dispersed in a light petroleum hydrocarbon. Maker, Bux Dri-Slide Division, Mag-Craft Corp., Grand Rapids, Mich., says the product can be sprayed or brushed onto such items as heat risers, fifth wheels shutters and linkages, brake cables, wheel studs, tachometers and trailer doors. After application, Dri Slide is said to leave dry, dust-free lubrication in film form which takes pressures up to 100,000 psi.

More details? Circle 459 on reply card

Cold vulcanizing

tubeless tire repair units called "Chemweld" have just been announced by Knicks Mend-Rite Co., North Kansas City, Mo. They're offered in six popular sizes for passenger car, truck and tractor tubeless or tube-type tires.

More details? Circle 460 on reply card



THE SERVIS PEPEED



MPH Model Tells:

- TRUCK SPEED all day
 DISTANCE TRAVELED
- . DURATION each trip
- DURATION every step
 EXACT TIME of each occurrence

Push Buttons • EXACT TIME are detachable

The driver pushes a button for the local speed limit and a light flashes if he exceeds it. No need to have the whole tach in front of the driver—just the small push button box which screws on the dash.

Big 6" charts are locked in the tamperproof recorder which can be located anywhere in the cab. Charts are completed every day or every 3 days—a period of time that enables you to check with the driver while he remembers the trip.



SERVIS TIME RECORDER

Records busy and idle time of trucks, time of day and duration of every stop. Big charts show 1, 3, or 7 day record. Available: Model that records engine idling time in addition.

SERVIS FUELOMETER

Measures gasoline actually used by engine. Installs between fuel pump and carbureter. Foolproof. Records up to 9999.9 gallons—then repeats. Sells for only \$57.50.



Send for FREE Literature

The SERVICE RECORDER COMPANY

Our 50th Year

World's most complete line of truck recorders

COMMERCIAL CAR JOURNAL, February, 1961

More details? Circle 181 on reply card inside back cover

When temperatures fall, dry-charged batteries are tough to activate. The American Battery Manufacturers Asso-

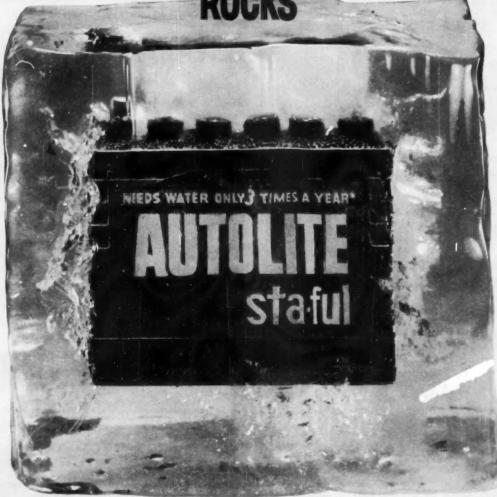
ciation has set 60° F. as an activation minimum for the industry. But, as a fleet owner, you realize that a battery is frequently called upon to activate at far lower temperatures, that batteries are often stored in unheated warehouses or even installed outdoors. Sound like an old familiar story to you? Then here's something that should interest you about Autolite

BATTERY DIVISION . TOLEDO 1, OHI

dry-charged batteries. The Electric Autolite Company has established its own cold activation point at 30° F, a

full 30° under the industry minimum, and actually 2° below freezing! Consider what this means to you as a fleet operator. It reduces storage problems, of course . . . eliminates activation worries for good. And you get fresh power, when you want it, no matter how cold the weather may be. So, next time you restock batteries, remember the name . . . Autolite!

POWER ON THE POOKS





"Clevite 77? They're the best ...

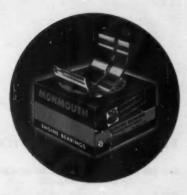
... we've been using them for as long as I can remember. With more than 150 over-the-road units to keep rolling at a profit, we want only the highest quality parts in our engines. That's why we use Clevite 77 bearings—we know they'll do a top job."

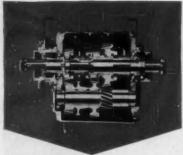
Most fleet operators, like Mr. Fears, know that Clevite 77 bearings have the built-in quality to perform at a profit. Their patented trimetal construction gives longer, trouble-free performance. For your next engine overhaul, get Clevite 77 from your NAPA jobber—he has a complete stock.

MONMOUTH Engine Bearings

CLEVITE SERVICE: Cleveland Graphite Bronze . Division of Cleville Corporation . Cleveland 3, Ohio

states R. O. Fears, Shop Superintendent Delta Motor, Incorporated Jackson, Mississippi





Specify

FULLER

Specify the

MODEL

For medium-heavy duty trucks and tractors specify the

FULLER '65 SERIES

3-SPEED AUXILIARY

- High capacity
- Widest range of ratios
- Top-mounted power take-off optional
- Low initial cost, reduced maintenance
- Available from all truck manufacturers on specification

MODEL	SPLITTER	Inter-	REDUCTIO Low
	SOLD STATE	mediate	1925
3-A-65 3-B-65	.754	1.00	1.239
3-E-65	.754	1.00	1,239
3-D-65	.804	1.00	2.221
3-E-65	.804	1.00	1.74
3-F-65	.754	1.00	1.74
3-G-65	1.00	1.32	2.221
3-H-65	1.00	1.32	1.74
		00	1
		1-17	1-1
2		1-11-1	~ 10000

Specify the MODEL

FULLER TRANSMISSION DIVISION

EATON MANUFACTURING COMPANY KALAMAZOO, MICHIGAN

That SNOW must go

Continued from Page 115

- 9 Oshkosh 4-wheel drive plows powered by Cummins diesels.
- Oshkosh gasoline-powered winch truck for pulling in disabled equipment.
- Baughman sand spreader, plus a spare.
- 3 Highway spreaders for spreading a mixture of sand, salt and calcium.
- 2 Anthony spreaders.
- 2 hired gasoline-powered Internationals and one hired Brockway for sand spreading.

Also available on a hired basis are:

- 4 Plows mounted on Brockways.
- 3 Plows mounted on Fords.
- 3 Plows mounted on Internationals.
- 3 Plows on GMC's.
- 1 Diamond T.
- 1 Walters Snow Fighter owned by an individual.

In addition to the equipment already listed, the Department has four graders—2 Cats and 2 Galions—mostly used for ice cutting projects. It also operates five 1½-ton Chevrolet trucks for salting, using either a funnel or Scotchmen salt spreaders.

All county-owned plows and sanders have been radio equipped since 1942. Radio units were replaced with a completely new system in 1959, costing \$37,000.

Controlling this variety of equipment is the key to the efficient snow removal program. The major control takes place in the dispatching room at the Falconer headquarters. Dispatching is split into three eight-hour shifts, going on 24 hours a day regardless of weather conditions. Plowing is split into 12-hr shifts on the trucks, plus relief time.

Snow Removal Map

Located in the radio room in front of the dispatcher is the Snow Removal Map, the hub of the control system. It's a large map of Chautauqua County showing all the state, county and town roads. Above the map is a chart broken down into equipment columns. After each

category is an "out of order" column.

A small, round, cardboard button represents each piece of equipment. On each button are key numbers. For example, a button might have the following:

11 (means truck No. 11) 230 (means plow number)

V (means V-type plow)

or another one might read:

11 (means truck No. 11) 230 (means plow number)

→ (but an arrow means truck No. 11 is using a one-way plow rather than a V-type.)

Each button is placed after the proper heading on the chart. If a truck and plow is broken down, or is still being repaired, the button is turned upside down and placed in the "out of order" column, showing that a piece can't be used.

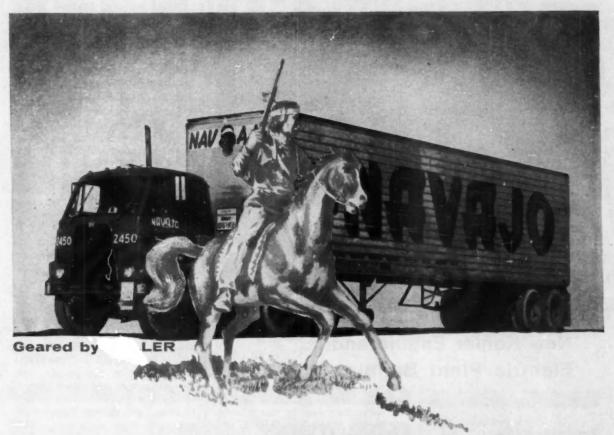
Should a certain section call for a truck with a V-type plow, the dispatcher looks at the chart above the map. He finds, by looking at the line called "County Trucks and V-Plows," that the button for truck No. 11, with a number 230 V-type plow, is available. The button is then taken from the line and placed on the map in the general area to be plowed.

The County Highway department can tell immediately from the buttons on the map in what sections county trucks and plows, rotaries, graders, sanders, hired equipment, etc., are working. By examining the upside-down buttons, they know what equipment isn't available. And by looking at buttons next to each category, they immediately know what equipment is still available if needed.

Road Reports

But, what about road conditions? How does the Department know where and when to send snow fighting vehicles? To get this information, two "checkers" in half-ton Chevrolet pickup trucks travel roads throughout the County watching for areas needing plowing,

(TURN TO PAGE 154, PLEASE)



... Created in 1947, Navajo Freight Lines, Inc., Denver, has demonstrated remarkable growth. Today, over three-quarters of the United States,

Blue-Eyed Indians Roam the Navajo Trail

Helping Navajo* to maintain maximum reliability in severe, long-haul operation are the company's fleet-footed International and White-Freightliner Tractors equipped with

* whose well-known symbol, a blueeyed Navajo Indian, is the fortunate result of an artist's mistake. Fuller 5-W-74 5-speed Transmissions and Eaton 2-speed Axles. Many of these tractors are well past the quarter-million-mile mark and have given trouble-free service since they were purchased. Because of the dependability of the heavy-duty 5-W-74s, Navajo has extended routine preventive maintenance cycles for its Fuller

Transmissions to 200,000 miles.

Laurence Cohen, President, says, "Our operations require on-time delivery of shipments—often over long distances—regardless of conditions of time, temperature and terrain. Fuller Transmissions give us the dependability we need for profitable service to our customers."

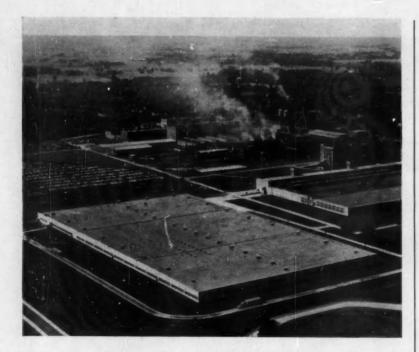
FULLER TRANSMISSION DIVISION

EATON MANUFACTURING COMPANY



KALAMAZOO, MICHIGAN

Seles & Service: West. Dist. Branch, Onkland 6, Col. • Southwest Dist. Office, Tulse 3, Okla. • Automative Products Co., Ltd., Brack House, Longhum St., Landso W.1, England, European Rep.



New Kohler Engine and Electric Plant Building

Capacity to meet growing sales

ENGINES
MODEL K161
4-cycle
Short stroke
Air-cooled
Sizes: 4 to 24 H.P.



Our customers' requirements will be met better than ever by the 12 acre new factory devoted entirely to the manufacture of engines and electric plants at Kohler, Wisconsin.

The building provides nearly three times the space formerly available, and allows for further expansion. Straight-line, one-floor production and newest equipment mean increased production, prompt deliveries.

Kohler engines, manufactured since 1920, are being increasingly specified for equipment used in agriculture, construction, industry and recreation. Kohler electric plants, known the world over for reliability, provide efficient electric power for a wide variety of sole supply, portable, automatic stand-by and marine uses.

Highest standards of service are assured by a nation-wide distributor and dealer organization.

The new factory is part of a continuing plan of expansion and diversification by Kohler Co.

Write for illustrated printed matter K-16

KOHLER CO. Established 1873 KOHLER, WIS.

KOHLER OF KOHLER

ENAMELED IRON AND VITREOUS CHINA PLUMBING FIXTURES • ALL-BRASS FITTINGS

ELECTRIC PLANTS • AIR: COOLED ENGINES • PRECISION CONTROLS

That snow must go

Continued from Page 152

sanding or salting. When they find one, the checker radios in to the dispatcher at headquarters.

Special marks are placed on the map at once. If a section of road requires plowing both ways, the dispatcher marks a solid red line along one side of the road needing the work. If it needs plowing only one-way, a broken red line is placed on the side requiring it. If the road is rough and needs grader work, a "G" is marked on the spot. If an area needs salting or sanding, it's marked with an "S." Work requiring rotary equipment is designated with an "X."

The dispatcher then sends the necessary vehicles and men. The button remains on the map until the work is completed. Then the area marked in red is gone over with a black pencil and the button placed back in the proper category. Next to the black line is written the type of equipment used there and approximate time the job was finished.

Log Books

Weather information is placed on a daily weather forecast log, with the time and source it came from. Also listed is the time a "checker" starts, what area he will cover, and what time he calls in with road condition reports.

There is a separate log maintained for each piece of equipment. It shows time worked on both State and County roads. New logs are started each midnight. The radio log shows each time trucks are given new orders and just what they are. When the driver completes his orders, he also calls in and gives a report of the road and weather conditions. When the plows are changed on a certain truck a new log is started for that truck.

Should a storm become too severe, requiring changing from one-way to V-type plowing, the dispatcher calls in equipment one piece at a time to prevent jam-ups in the yard.

END

Please Resume Reading Page 116

NEW FRAM WEAR-GUARD FILTERS PROVED GREATEST ADVANCE IN ENGINE PROTECTION SINCE DETERGENT OILS!

Tests show new Wear-Guard construction traps up to 40% more dirt than any other filter tested! It guards engines against unnecessary wear...stops fuel waste!

The secret is in the construction! Thousands of tiny filter pockets are packed inside new Fram Wear-Guard Filters with new pleated fiber. Tests-including radioactive tracer techniques-prove Fram Oil and Air Filters with Wear-Guard will keep car engines safer than any other filters tested.

Fram's exclusive Fleet Survey System will keep your vehicles protected with new Fram Wear-Guard Filters with an absolute minimum of inventory! For details,

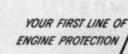
GEneva 4-7000

phone or write: FRAM CORPORATION, PROVIDENCE 16, R.I.



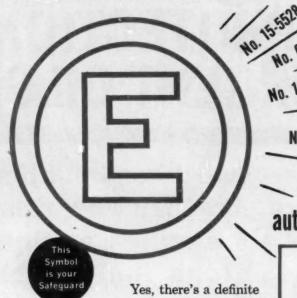






FRAM OIL AIR FUEL WATER FILTERS

There's safety in NUMBERS!... numbers like these ...



No. 5870 No. 5869 No. 15-5626 No. 4895 - No. 15-5627 No. 15-5629

EBERHARD

offers the greatest number of automotive hardware items available

safety factor protecting you in more ways than one when you wisely standardize on the top quality line of Eberhard automotive hardware items.

There's SAFETY in the proper design, SAFETY in positive locking and holding action of all (E) locks, SAFETY in the service that is yours when you rely upon one solid source for your truck and trailer body hardware.

Pictured here are just a few of the many comparatively new locks, hinges, door holders, door hangers and miscellaneous items. These are made available by Eberhard to aid body builders & fleet maintenance shops throughout the world.

Remember, too, uniformity permits interchangeability, affording welcome economies for users of the (E) line.

Write for specific information on any or all items which interest you.



EBERHARD MANUFACTURING COMPANY YARTS AVE . CLEVELAND 4, OHIO

LONGRUN



Lyman Wilbur, Fleet Manager of My Bread Baking Co., New Bedford, Mass., reports:

> "we cut the cost of ring jobs from \$1500 to \$250 a year...and got 50% longer service life per truck"



"The reason?

Preventive maintenance and excellent RAMCO rings ... easily superior to the original equipment"

Lyman Wilbur is a fleet expert—a man who knows. His fleet of 185 trucks—award winners 4 years in a row—cover nearly 3 million miles per year, yet his maintenance cost is only 6.5¢ per mile—only 2.05¢ for gas, oil, grease and time.

"We install RAMCO rings instead of engine blocks after 80,000 miles." Mr. Wilbur says, "Our oil consumption has improved to the point where we get 3370 miles per added quart.

"On our older trucks, dating back to 1947, RAMCO rings help give us an additional 40,000 miles before we replace the block.

"RAMCO rings and preventive maintenance are a profitable team for us."

Your RAMCO fleet jobber can tell how RAMCO rings can help you cut cost, increase profit. Call him soon.



BREAK-IN TIPS. In 1958 Mr. Wilbur started replacing rings in their P-350's, purchased in 1952. Some of these engines have excellent compression after 160,000 miles.



PISTON RE-SIZING. Most maintenance in done at My Bread garage. Jobber Mullins renews wrist pins, expands pistons, aligns rods, cuts and shims top grooves.



WHY "BACKBONE" IS IMPORTANT. Shopman Raymond Roy, President Duchane and Tom Mullins discuss the Ramco C-9 "backbone"; how it provides conformability, stops oil pumping, clogging.



FREE "BACKBONE FACTS" FOLDER tells why RAMCO rings are "easily superior to original equipment." See your Jobber or write today.





See us at the I.A.S.I. Show Booths No. 1303-4-5-6

> backbone difference

RAMCO MODERN POWER PISTON RINGS
RAMSEY CORPORATION, ST. LOUIS 8, MISSOURI, a subsidiary of Thompson Ramo Wooldridge Inc.

Here's how your fleet can get "downtime" and lower costs



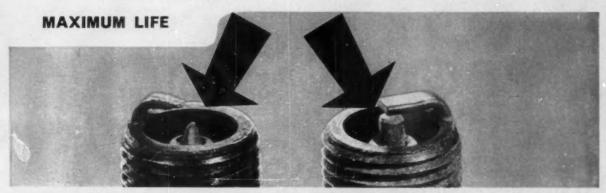
To help fleets get the best engine performance with the lowest operating costs, Champion uses "mobile service laboratories" to bring the latest technical "know how" right to the job. Only Champion does this. These mobile units are operated by Champion field engineers. Highly trained and armed with the latest scientific equipment, these engine experts give on-the-spot help in the correction of ignition troubles.

Your fleet can use this exclusive technical help to boost performance and cut operating costs. Call your Champion Sales Representative or supplier, or write Technical Service Dept., Champion Spark Pug Company, Toledo 1, Ohio.



Champion service aids are designed to cut your labor costs, speed up repairs and prevent unscheduled "downtime." The Champion Plug-Scope is an outstanding example. With a Plug-Scope you can check an entire set of plugs, right in the engine, in less than 60 seconds! Handy, easy to "read" and accurate, it's designed to track down many ignition troubles, too.

better performance, less with Champion "know how"



Both of these spark plugs were used in the same engine for the same period of time. The engine was operated under heavy hauling conditions that pushed combustion chamber temperatures up into the critical ranges. See how Champion's Powerfire electrode (rt.) outlasted the other! That's why you get better performance longer with Champion spark plugs.



Service Tips

...For Improving Performance and Cutting Maintenance Costs

Clogged air filters can cause rough idling... even if they don't drop gas mileage. And power loss or surging can often be traced to filter obstructions. It's a good practice to check these possibilities before getting into time-consuming repair.

Unnecessary racing of cold engines

Champion resistor-type spark plugs reduce ignition noise in two-way radio-equipped vehicles. In many resistor plugs, heat pushes resistance too high or too low. Plugs misfire, or ignition noises come through. Champion resistor spark plugs reduce noise and fire smoothly at all engine temperatures. Ask your Champion representative about these special plugs.

should always be avoided to allow proper circulation of lubricants. This is especially important with hydraulic valve lifters. If the lifters should be partially empty when the engine is started, running at high rpm immediately could force the plungers into a cocked position in the lifter bodies.

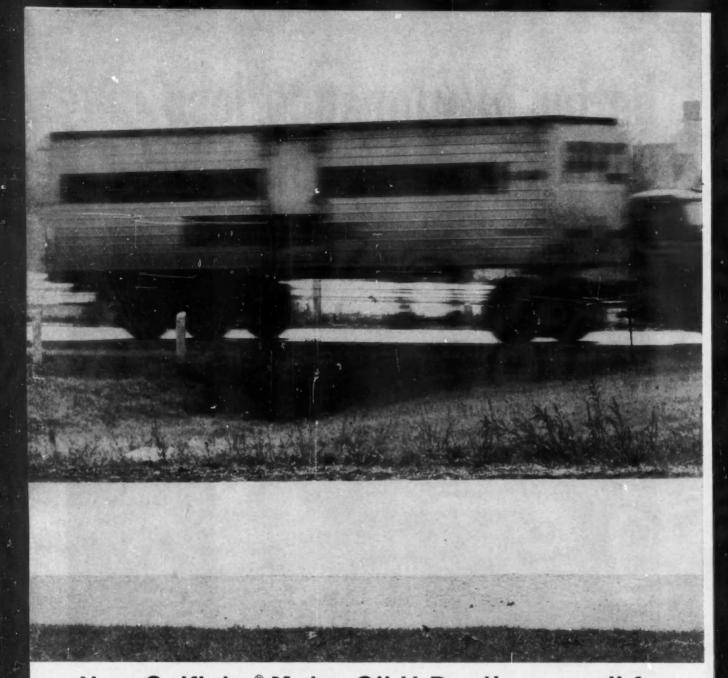
DEPENDABLE

CHAMPION

SPARK PLUGS



CHAMPION SPARK PLUG COMPANY . TOLEDO 1, OHIO



New Gulflube® Motor Oil H.D.—the one oil for GULF MAKES THINGS

New Gulflube® Motor Oil H.D. provides complete engine protection for both hot temperature, long distance hauling and cold temperature stop-and-go operations. In short: it's a versatile oil for gasoline, diesel or LP gas engines.

This Supplement 1 level oil has good stability because it's formulated with distillate "heart of the crude" base oils. And new additives give it maximum detergency, dispersancy and resistance to oxidation. These same additives prevent excessive wear.

Gulflube Motor Oil H.D. offers important benefits like these:

- Cleaner engines in both combustion zone and lubrication zone.
- 2. Low oil consumption.
- 3. More mileage between ring jobs and overhauls.
- Lubrication protection over the entire enginetemperature range—regardless of the combina-



both over-the-road and stop-and-go service ...

RUN BETTER!

tion of start-stop and over-the-road driving by each vehicle.

 One oil simplifies purchasing, storing and handling. (Available in SAE grades 10W, 20/20W, 30, 40, 50.)

Try new Gulflube Motor Oil H.D. in your fleet. See for yourself how Gulf makes things run better! For complete details, use the coupon. Or call your nearest Gulf office.

More details? Circle 190 on reply card inside back cover

GULF OIL CORPORATION

Dept. DM, Gulf Building

Houston 2, Texas

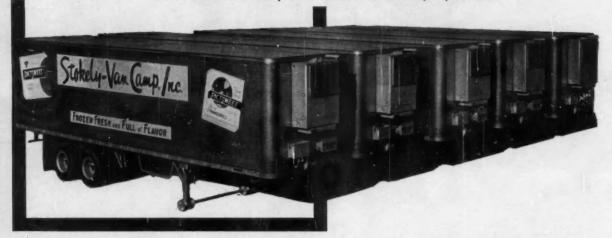
Please send me booklet on new Gulflube Motor Oil H.D.

Name______
Title_____
Company_____
Address____

City____Zone___State____



Stokely-Van Camp, Inc., Indianapolis, Indiana, one of the nation's largest food processors, has 177 Fruehauf Stainless Steel Volume☆Vans and Reefers. Stokely-Van Camp's Fruehauf Trailers operate out of 70 terminals throughout the United States and Canada. Last year its fleet covered almost 6,000,000 miles.



"We've <u>never</u> worn out a Fruehauf Stainless Steel Trailer!"

R. E. Bobemoyer General Fleet Superintendent Stokely-Van Camp, Inc. Indianapolis, Indiana

Durability is only one of the many reasons why large haulers like Stokely-Van Camp, Inc., buy, and continue to buy, Fruehauf Stainless Steel Volume☆Vans. Fruehaufs are quality designed and quality built to do your hauling better! Hundreds of Fruehauf Stainless Steel units—Reefers, Vans and Open Tops—have been in continuous operation for fifteen years and longer.

Here are some of the reasons why Fruehauf Stainless Steel Volume † Vans are your greatest dollar-for-dollar buy:

cperation no stainless steel van has ever worn out! It's best for hauling most corrosives because stainless resists corrosive materials better.



HIGH PAYLOAD CAPACITY—Stronger stainless steel permits thinner gauge. So weight is way down, payload way up!

LOWER MAINTENANCE COSTS—Stainless Vans never need paint. Damage repairs are materially lower, too.

HIGHER TRADE-IN VALUE — Year after year Fruehauf Stainless Steel units have continued to bring higher prices on the used trailer market!

NEW LOW PRICE MAKES STAINLESS EASIER TO OWN, TOO!

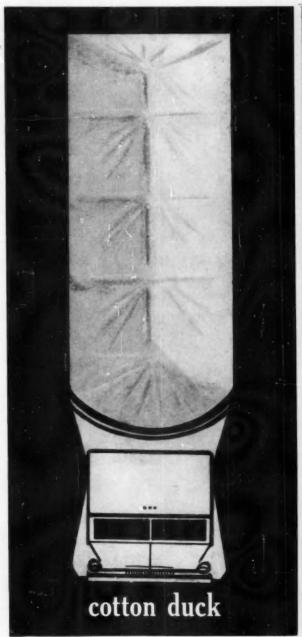
Why not ask your Fruehauf Branch salesman to give you complete information on the Fruehauf Stainless of your choice today?

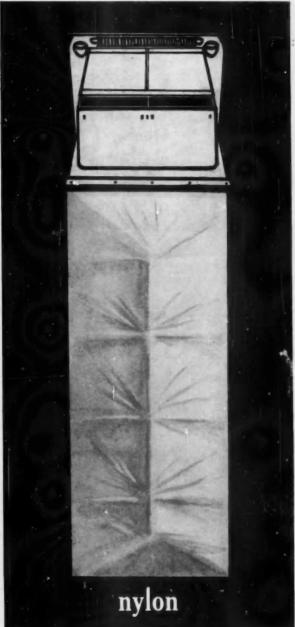


10940 Harper Avenue, Detroit 32, Michigan 5137 South Boyle, Los Angeles 58, California



If It's A Fruehauf, You Get More -So You Pay Less!





either way, you're covered

Year after year, leading fabricators of truck tarps use Wellington Sears fabrics. And for very good reason: year after year, these famous protective cover fabrics are tops in performance and appearance!

The wide range of Wellington Sears cotton ducks, distributed by leading jobbers, includes a hard-wearing brand for every application. Welkote nylon, our base fabric specifically engineered for vinyl or

neoprene coating, is the choice of quality coaters everywhere. In addition to strength, it provides unusual lightness and flexibility.

When you use Wellington Sears fabrics, you're giving your customers quality backed by more than a century of experience. Write Dept. Y-2, for names of suppliers—and for a free copy of our illustrated booklet, "Protective Cover Fabrics."

WELLINGTON SEARS §

FIRST IN FABRICS FOR INDUSTRY

Wellington Sears Company, 111 W. 40th St., New York 18, N. Y. - Akron - Atlanta - Boston - Chicago - Dallas - Detroit - Los Angeles - Philadelphia - San Francisca

COMMERCIAL CAR JOURNAL, February, 1961

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More details? Circle 194 on reply card inside back cover -

Get the Extra Power, Performance.

AIR OR ELECTRIC

NO. 330

NO. 313

NO. 325

The new H.D. 1" No. 482 Air Impact Wrench, the mighty big one, is intended for the kind of jobs that tear up ordinary 1" wrenches.

SIOUX Air Impact Wrenches deliver up to 15% more torque while consuming 30% less air!

SIOUX Electric Impact Wrenches such as the No. 330 illustrated, deliver the extra measure of efficiency, performance and freedom from trouble you expect from SIOUX.

Use

and Long Life of

IMPACT WRENCHES!

NO. 482

NO. 270

NO. 322

WHEN IT'S A SIOUX YOU KNOW WHAT IT WILL DO— SIOUX tells you the torque your air or electric impact wrench will deliver. Don't buy just a wrench. Buy certified SIOUX power!

The No 270 SIOUX Slugger is an all purpose metal working tool. It cuts metal, breaks spot welds, splits nuts, shears bolts, punches out pins, and scrapes metal clean.

all the way through!

Sioux City, Iowa, U.S.A.

Canadian Warehouse: 379 Comstock Road Scarborough, Toronto, Ont.

SOLO THROUGH DISTRIBUTORS IN U.S., CANADA AND OVERSEAS. FIND YOUR NEAREST U.S. DISTRIBUTOR UNDER "TOOLS, ELECTRIC" IN THE YELLOW PAGES.

A AIR & ELECTRIC IMPACT WRENCHES • DRILLS • SCREWDRIVERS • NUT RUNNERS • SANDERS • GRINDERS A ELECTRIC POLISHERS • FLEXIBLE SHAFTS • PORTABLE SAWS • VALVE GRINDING MA-CHINES A ABRASIVE DISCS

"How much is enough for advertising?"

JOHN R. SARGENT, partner in the nationally-known management consultant firm of Cresap, McCormick and Paget, points the way toward solution of one of top management's knottiest problems.

"Good sales management generally knows the crucial sales problems faced by each one of its products. Through good advertising advice plus experience, trial and error, and some judicious advertising testing, sales management also can come to have a good understanding of what advertising can and cannot do.

"At the same time, sales management should be sure to take a careful look at what each of the other sales producing factors are supposed to be doing.

"If all these elements of the sales plan are carefully evaluated, and the key assumptions are checked regularly, you're off to a strong start in making sure that your advertising appropriations are neither so high as to be wasteful, nor so low as to penalize your marketing effort."

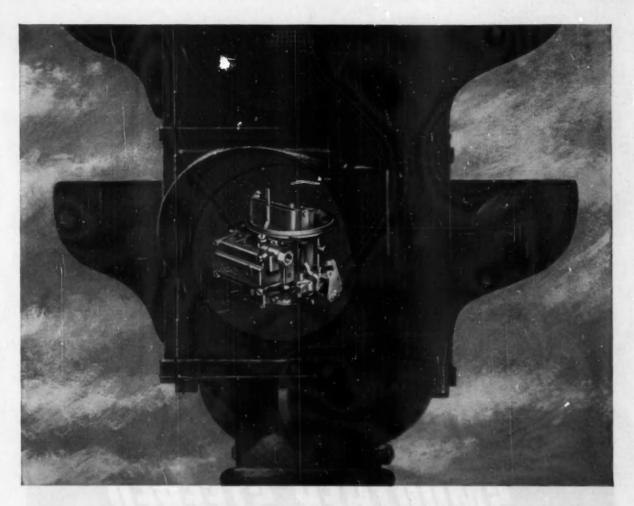




ASSOCIATION OF INDUSTRIAL ADVERTISERS

271 madison avenue • new york 16, n. y. • telephone murray hill 5-8921

An organization of over 4000 members engaged in the advertising and marketing of industrial products, with local chapters in Albany, Baltimore, Boston, Buffalo, Chicago, Cleveland, Columbus, Dallas, Denver, Detroit, Hamilton, Ont., Hartford, Houston, Indianapolis, Los Angeles, Milwaukee, Minneapolis, Montreal, Que., Newark, New York, Philadelphia, Phoenix, Pittsburgh, Portland, Rochester, St. Louis, San Francisco, Toronto, Ont., Tulsa, Youngstown,



What happens when the light turns GREEN?

A foot instinctively touches the accelerator. The idling engine springs to life, and the truck moves smoothly ahead. It seems so simple, yet literally years were required to design a Holley Carburetor to deliver the exact fuel-air mixture required for instant response when the light turns green, and maximum performance and economy under all conditions.

The ability to design and manufacture intricate carburetors to the specifications of each engine and vehicle is the reason why so many of today's automobiles and trucks have Holley Carburetors as *original equipment*. They are the latest additions to a long, distinguished parade of vehicles for which Holley has supplied over 65,000,000 carburetors.



Holley Carburetors and Ignition Equipment maintain the Holley reputation for precision quality and dependable performance.



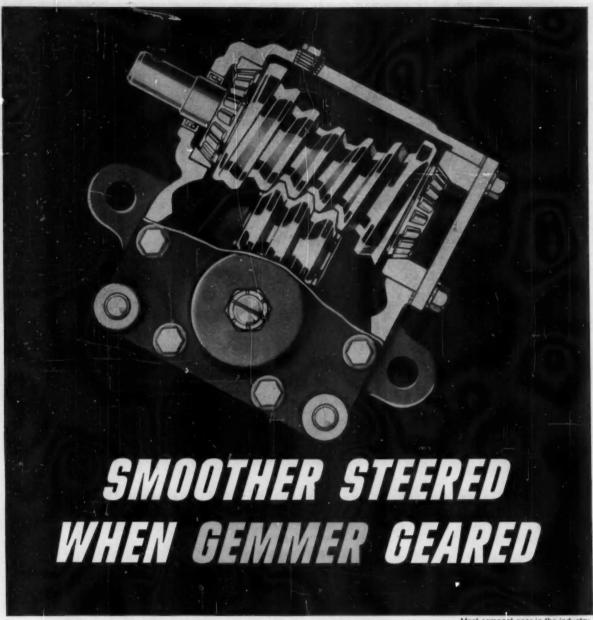
REPLACE WITH GENUINE HOLLEY PARTS—
MADE TO ORIGINAL EQUIPMENT

SPECIFICATIONS!

11955 E. NINE MILE ROAD, WARREN, MICHIGAN

T-12

See Your Authorized Holley Distributor or Dealer-Listed in the Vellow Pages



Most compact gear in the industry

Gemmer steering is engineered for strength and ease of operation . . . built for lifetime service and minimum maintenance. Customer pleasing features of the 7D gear are:

Compactness . . . High numerical ratio of 28:1 . . . An efficient, rugged gear . . . Simplicity of installation and adjustment . . .

Available in either malleable or aluminum housings

For your steering needs, Gemmer offers you experience as old as the industry.

Gemmer steering

ROSS GEAR AND TOOL COMPANY, INC.

Gemmer Division, Detroit, Michigan • Ross Division, Lafayette, Indiana

Planning On EXPANDING YOUR FLEET

In '61?





A Fruehauf Leasing Plan Helps You Expand Without Working Capital

A Fruehauf Trailer Leasing Plan may well be the solution to your capital outlay dilemma. If your business is outgrowing your fleet, yet you feel that other costs prohibit your buying new Trailers this year, it will pay you to investigate Fruehauf's Trailer Leasing Plans. Trailers leased from Fruehauf give you modern equipment immediately to meet any hauling crisis. It's the convenient, economically sound way to expand your fleet without tying up working capital. No matter what your hauling requirements may be-Volume \$\primex Vans for packaged goods, Tank-Trailers for liquids, Reefers for perishables, or a variety of units for bulk commoditiesif Fruehauf builds it, you can lease it!

A letter, phone call or the reply coupon below will bring a Fruehauf representative to your office. He's fully qualified to make a full analysis of your leasing costs and spell out the many benefits a Fruehauf Leasing Plan offers you. Also ask him about Fruehauf's Fleet Maintenance Plans, how you can buy leased units, and about Fruehauf's wide selection of used Trailers for lease or sale tailored to your hauling needs.

The Yardstick of Quality Transportation-For Over Forty-Seven Years!



TRAILER COMPANY

10940 Harper Avenue • Detroit 32, Michigan

PLEASE CONTACT ME ABOUT FRUEHAUF TRAILER LEASING PLANS

(please print)

State

COMMERCIAL CAR JOURNAL, February, 1961

More details? Circle 197 on reply card inside back cover

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HERE'S HOW IT WORKS All elements shown in solid green are included in the SCOTSEAL Kit. Unit illustrated: Fruehauf No. 5 axle. NO DOUBT ABOUT IT! You know bearings are protected. With SCOTSEAL, you actually see the oil level through Trailer Axie Oil Sealing Kit

- Adds to Bearing Life
- **Decreases Maintenance**
- educes Down-Time
- Fleet-Proved

Any way you look at it-dependability or cost-C/R oillubrication of trailer wheel bearings brings you many economies. (1) No more grease repacks-oil lasts from one brake reline to the next. (2) No burned-out bearings due to postponed repacking. (3) Less drag, lost power, and fuel wastage, because the SAE-30 oil remains freeflowing winter and summer. (4) More complete protection for brake linings against lubricant leakage.

Ask your C/R Supplier to show you the new C/R SCOTSEAL Kit* and the ingenious SCOTSEAL Installation Tool* that makes installation fast and simple. Here's a real money-saver in trailer operation. Don't put off a test application.

Installation is as easy as repacking and just as fast !

FREE FOLDER NOW READY

For complete information on the only conversion kit that permits the use of SAE-30 oil, ask your C/R Supplier for this new, free folder. Or, if you prefer, we'll be glad to mail direct.



*Patents Applied For.

SEAL OF PROVED PERFORMANCE



CHICAGO RAWHIDE

BERVICE SALES DIVISION CHICAGO 22, ILLINOIS



40-ton dragline puts the pressure on B.F.Goodrich tires

YET AFTER 100,000 MILES, TRACTION EXPRESS TIRES ARE STILL GOING STRONG

WRESTLING a 40-ton dragline around the countryside is a typical job for T. L. James & Co. of Kenner, Louisiana. Hauls range up to 2000 miles, loads up to 45 tons, with equipment often on the go round the clock. In spite of such a grueling schedule, B.F.Goodrich Traction Express tires give over 100,000 miles of service on the original tread. "B.F.Goodrich tires cut our operating expenses and downtime to a minimum," writes General Supt. George Williams.

The thicker, tougher Traction Ex-

press tread takes a firm, non-slip grip on the road, pulls in forward or reverse. Under the tread is the BFG Flex-Rite Nylon cord construction far stronger than an ordinary cord body. It resists heat blowouts and flex breaks—assures you of more retreadable tires. As T. L. James has discovered, Traction Express tires cut operating costs to a minimum.

Stop in at your B.F.Goodrich dealer's today. He has tires for every kind of highway hauling job, and for off-the-highway work as well. His tire know-how and service facilities can bring you big savings. You'll find your B.F.Goodrich dealer listed under Tires in the Yellow Pages. The B.F.Goodrich Company, Akron 18, Ohio.

Specify B.F.Goodrich Tubeless or tube-type tires when ordering new trucks or trailers



COMMERCIAL CAR JOURNAL, February, 1961

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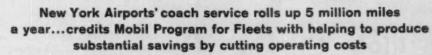
CAREY maintenance costs cut



Jet plane on viaduct taxi strip crosses busy artery at New York International (Idlewild) Airport. Carey provides an important ground link for 30 domestic and international airlines in the world's busiest aircraft terminals. Carey is also one of the largest operators of chartered coaches in Metropolitan New York, with charter rights in 50 states.



\$67,000 with Mobil Program



With its entire coach fleet—112 units—fueled and lubricated exclusively by Mobil, the Carey Transportation company handles more than five million passengers and seven million pieces of luggage yearly. Primarily a terminal-to-airport and airport-to-airport service, schedules are critical, and breakdowns could be calamitous.

To mai: tain maximum efficiency of operation and to hold operating costs to an absolute minimum. Carey relies on a Mobil Program for Fleets. Under the Mobil Program, Carey has realized its aims: Service delays have been materially reduced; savings in operating procedures affected by petro-

leum products amounted to \$67,112 in 1959 alone. According to John P. Carey, Jr., V.P., "Mobil lubrication engineering service has been very helpful in assisting us with a number of our maintenance problems. Mobil's studies and preventive maintenance recommendations have resulted directly in reduced costs."

The Mobil Program for Fleets is proving its value in a variety of fleet operations. Mobil can prove its value to you. For more information call your Mobil Representative or write, Mobil Oil Company, 150 East 42nd St., New York 17, N. Y.



Analysis of equipment, methods, results. Savings: \$5,362. Periodic inspection and study of equipment has greatly improved vehicle efficiencies at Carey. Says R. G. Mc-Mahon, Superintendent of Equipment, "For example, Mobil technical service has made periodic analyses of motor oil samples, helped establish optimum oil drain intervals."



Employee effectiveness. Mobil training films are used by Mr. John Vitale, Carey's Director of Safety, to help promote cooperation between Carey drivers and mechanics. Mobil technical clinics, too, are used to augment film training, helping Carey realize an effective overall maintenance program, helping make possible Carey's outstanding record for safety achievements.



Correct application. The right product, in the right place, at the right time has helped Carey establish optimum lube intervals on front end and chassis parts, reduce repairs and replacements, save on labor and material, realize impressive savings. On 5,000,000 miles, with correct application of a superior Mobil grease, Carey has saved \$53,750.



Preventive maintenance. R. G. McMahon says, "With the cooperation of Mr. Jack Snyder (Mobil Engineer) a preventive maintenance schedule was set up (that) has materially reduced service delays . ." Utilizing Mobil Preventive Maintenance techniques, Carey has increased overhaul intervals by 50%—from 200,000 to 300,000 miles. This has saved Carey \$8,000 in one year.

Program for Fleets

LEECE-NEVIL

6000-series alternator answers the need for adequate electrical power at ower cost



The Leece-Neville Company, Dept. CC-2 1374 East 51st Street • Cleveland 3, Ohi

Please send me more information on: 6000-Series Alternator

Heavy Duty Alternators

Zone State

Type of Service

Leece-Neville, since 1946 the pioneer and leading supplier of alternators for heavy duty automotive service, announces a new, compact 40-Ampere alternator priced in line with comparable DC generators.

If you experience costly battery failures and other electrical system troubles with vehicles in your fleet, but feel that the money difference for 50 to 60-Ampere alternators previously available is too much to justify in your type of operation, Leece-Neville's new 6000-Series Alternator is the ideal solution. Under normal operating conditions, this powerpacked alternator has a 40-Amp rating, and delivers 5 to 10 amperes at curb idle. With this unit, your battery is used only for starting the engine, remains charged at all times.

The new L-N 6000-Series Alternator is backed by Leece-Neville's 14 years of extensive field experience with heavy outy alternators, and by a 50-year reputation for building quality electrical equipment. Designed and constructed to Lecce-Neville's usual heavy duty concepts, it will be available as factory-installed special equipment through almost all vehicle manufacturers.

RUGGED DESIGN ... QUALITY CONSTRUCTION ... HIGH PERFORMANCE AT LOW COST

- · Compact and lightweight for savings in both space and weight.
- High performance 40-Amp rating at low cost in line with comparable DC generators.
- 5 to 10 amperes at curb idle.
- Replaceable built-in Silicon rectifiers mounted in separate high efficiency heat sinks, and protected from alternator heat (stator and rotor heat losses).
- Sealed anti-friction ball bearing at the drive end . . . efficient roller bearing at slip ring end.
- Slip ring assembly fully shielded to protect brushes and slip ring from contamination, assuring long life.
- Exclusive soldered connections between heat sinks and rectifier cells for better electrical and thermal conductivity.
- Silicon diodes (rectifiers) have built-in overload and high temperature capacity.
- Self-limiting current requires only simplified voltage regulator.
- Positive or negative ground types available.
- 6-volt types available.
- · Reversible-clockwise or counter-clockwise rotation, limiting stock requirements.
- Heavy duty design concepts (protected windings, splash proofed, etc., at no extra cost to you).

TYPICAL TYPES OF SERVICE WHERE THE **6000-SERIES ALTERNATOR WORKS LIKE ATROJAN**

Door-to-door Delivery Taxis, Officials' Cars Motor Freight Civil Defense

Utility Companies

Construction Ham Radio Cars Suburban Police Units Air Conditioned Cars And many, many more— including your personal car!

ALTERNATORS FOR ALL! Leece-Neville offers you alternators for every type of service, from passenger car to the biggest truck or tractor-all designed to save batteries, cut maintenance costs and practically eliminate downtime caused by electrical failure. For more information about the new 6000-Series Alternator, or alternators for heavy duty service, just mail the coupon at the left.

More details? Circle 201 on reply card inside back cover



COMPACT...LIGHTWEIGHT...
HIGH PERFORMANCE...LOW COST

MOST EGO DIESELS IN CUMMINS NHE 180

Proved Tops in Fuel Economy Three Ways—Cummins NHE Diesels are the most economical diesels in the nation. Against the two principal competitive diesels, the NHE-180 and NHE-195 deliver an average of more than 10% better fuel economy. This was proved three ways in a series of tests lasting an entire year.

First tested on dynamometers, the NHE's ran from 7% to 12% longer on the same amount of fuel than the other two diesels. The engines were then installed in trucks for competitive road tests. Here, the NHE's delivered from 4% to 22% more miles per gallon. Finally, fleet records proved the NHE's delivered from 4% to 23% more miles per gallon in actual day to day operation!

Proved Tops in Design and Low Maintenance
—Cummins NHE Diesels are large bore,

low RPM engines, which deliver from 10% to 15% savings in maintenance. They feature the same basic design as the most proven highway diesel in use today, the Cummins NH-220.

Nationwide Acceptance — Major fleets all over the country are using the new Cummins NHE Diesels. A partial list includes: Atkins Transfer Company, Inc • Associated Transport, Inc • Carolina Freight Carriers Corporation • Central Truck Lines, Inc • The Davidson Transfer & Storage Company • Delta Motor Line, Inc • Delta Transport Company • Dohrn Transfer Company • J. E. Faltin Motor Transportation, Inc • Fowler & Williams, Inc • Fox & Ginn, Inc • G. & H. Transit Company • Louis Groh & Sons • Hall's Motor Transit Company • Hemingway Brothers, Brooks Division •



NOMICAL THE NATION AND NHE 195 DIESELS

Hemingway Brothers Interstate Trucking Company • Hoover Motor Express Company, Inc • Lombard Brothers, Inc • Morton Frozen Foods Division, Continental Baking Company • Pilot Freight Carriers, Inc • Ryder Truck Lines, Inc., Great Southern Division • S. & W. Motor Lines, Inc • Super Service Motor Freight Company, Inc • Union Cartage Company • Wheeling Pipe Line, Inc • Wooster Express, Inc.

Nationwide Availability—Today dealers everywhere are selling NHE powered tractors. NHE Diesels are available in: Autocar—Brockway—Diamond T—Dodge—F.W.D.—Ford—Hendrickson—International—Kenworth—Peterbilt—Reo—White—White Freightliner.

Write for the free brochure "Cummins NHE Diesels Proved Tops in Fuel Economy

Three Ways." This booklet explains how the three tests were conducted, the test results, and why the NHE Diesels are the most economical diesels in the nation.

Cummins offers a complete line of naturally aspirated NH Diesels from 180 to 250 h.p. In addition to the economy NHE models—The famous NH-220 and the new NH-250.

See the NHE at Your Cummins Distributor—Attention Eastern, Mid-Western, and Southern Truckers; see and inspect Cummins NHE Diesels during "Cummins NHE Days" from February 27 through March 3. Your Cummins Distributor will be holding open house to acquaint you with the advantages of the Cummins NHE-180 and NHE-195.

CUMMINS ENGINE COMPANY, INC., COLUMBUS, INDIANA

INTERNATIONAL SALES & SERVICE — CUMMINS DIESEL INTERNATIONAL LTD., NASSAU, BAHAMAS — CABLE: CUMNAS OVERSEAS FACTORY — CUMMINS ENGINE COMPANY LTD. — SHOTTS, LANARKSHIRE, SCOTLAND

ANNOUNCEMENT! U.S.ROYAL



Now-more mileage for drive wheels

New Mileage Record

Test results show consistent 100,000 mile performance from this new nylon cord tire.

Flattest, Widest Tread

Greater stability, increased mileage, less tread flexing, reduced heat problem.

New Tapered Lugs

Lugs wider at center for extra support and added mileage, narrow at shoulders for more traction and maximum cooling.

Deep-Drive Traction Power

Full lug design, plus 449 traction slots give over 1000 extra inches of road gripping edges.

New Weather Protection

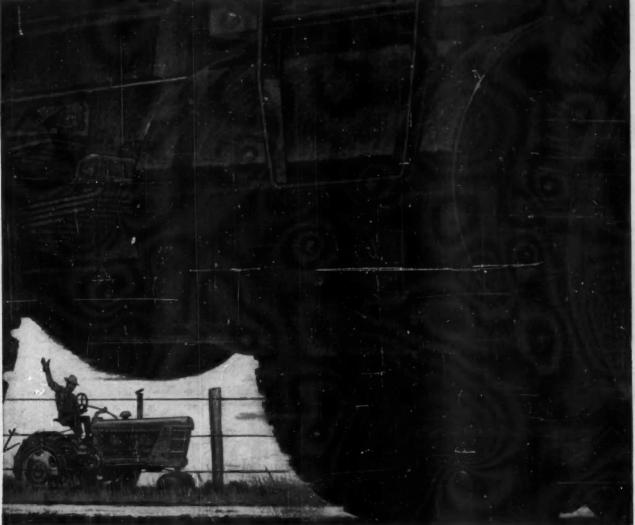
Exclusive chemical additives, including Flexzone 3-C, protect this outstanding new tire against ozone and weather cracking.

New Post Inflation

Post-cure process controls nylon growth. New or used tires can be matched more accurately.

SPECIFY U.S. ROYAL FLEETMASTER SUPER LUG WHEN YOU BUY NEW TRUCKS OR TRACTORS

FLEETMASTER SUPER LUG



.....the wheels that do the work!

The *full* story is even more amazing. Get it from your U.S. Royal Dealer or Tire Center.

U.S. ROYAL TRUCK TIRES



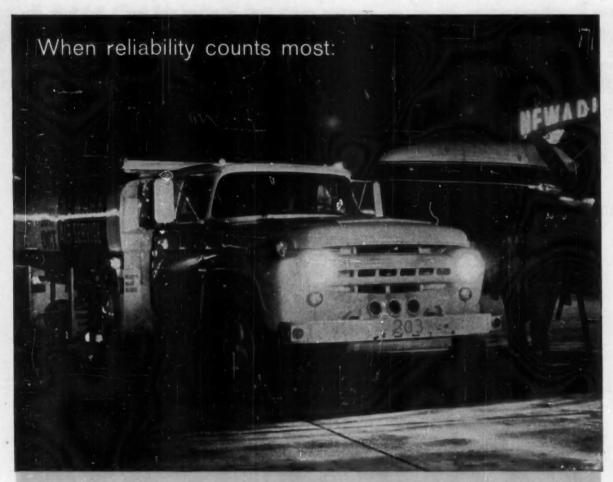
United States Rubber

Rockefeller Center, New York 20, N.Y.

COMMERCIAL CAR JOURNAL, February, 1961

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Rely on Tung-Sol

It's not by chance that fleet after fleet depends on Tung-Sol Heavy Duty Headlamps to tackle the toughest, most demanding headlighting assignments. Tung-Sol 4005s and 6013s are engineered and built to deliver.

When the chips are down, their ruggedized construction features — durable filaments, anti-shock fog cap support, extra-strength spot weld leads, vibration-resistant ceramic collars — pay off in performance . . . the kind of performance that gets fleets through — safely and on time — whatever the road and weather conditions.

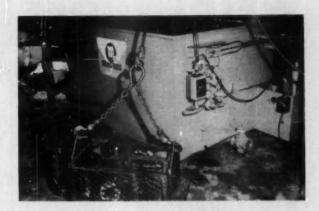
Switch your fleet to Tung-Sol and switch on the most rugged headlamps ever built. Automotive Products Division, Tung-Sol Electric Inc., Newark 4, N. J.



TUNG-SOL

Heavy Duty Headlamps

Sam Evans, transmission rebuilder, saves time on parts cleaning



H AND CLEANING of automotive parts is a costly and time-consuming job. One flat-rate manual recommends allowance of \$12 to \$18 for a typical, 3-hr hand-cleaning job on one transmission. This figure may be high, but you must admit that a cost of from 20¢ to 50¢ for cleaning one disassembled transmission unit is considerably lower than hand-cleaning cost for any shop. That's the average cost claimed for cleaning with the new process developed by Magnus Chemical Co., Garwood, N. J.

Sam Evans Auto Parts, Philadelphia rear-assembly and transmission rebuilder, says the new method of automatic parts cleaning really pays off for him in the following ways:

- Savings of \$150 to \$200 in weekly labor costs.
- Elimination of work returned because of improper cleaning.
- Reduced material and labor costs with the system's decarbonizing chemical that extends work life of parts.
 - · Six-fold increase in production.

It's got to be good

Evans' operation requires fast and thorough results on all his jobs. Along with a large volume of business with private truck and auto owners, the shop handles transmission work for Hertz Rent-a-Car, Philadelphia, a 200-truck Foremost Dairies fleet, 90 trucks of Burke's Meatpacking Co., and some 2000 military vehicles from Fort Dix, N. J.

Evans was using dip tanks and a force of three men just to clean dismantled units. Parts were dipped and hand-brushed many times in the process. The old method seldom removed deep-seated soil that hid cracks and worn surfaces of parts. Despite careful inspection and work, leaks and defects often led to return of rebuilt units.

Test machine installed

When he decided to try the new method, Evans installed a standard 75-lb capacity, 24-gal Magnus Miji-Lif parts cleaning machine. The unit, which takes up less than 1 sq yd of workspace, is best-used with Magnus 755 decarbonizing compound. Parts are pneumatically agitated in a solution of the decarbonizer and water. The machine performs the entire cleaning operation with a single-lever control. It lowers the basket or platform of parts into the solution, agitates it at a rate of 50-140 up-and-

down motions per min, then raises the work to waist level for inspection and unloading. Swishing of the effective cleaning solution into complex parts reaches hidden areas not usually penetrated. Agitation gives the dirt-removing action and pressure needed to flush out grit, chips and other particles often trapped in transmissions and rear assemblies.

Manpower reduced

Only one man was needed to operate the new machine, as compared to the three men employed in hand-cleaning operations. This released two of them to apply their skills to other jobs. Cleaning was so thorough that inspection of parts showed defects that might mean rebuilt units would be returned. This further increased savings.

The test proved so successful that Evans decided to keep the machine and also purchased a larger model. He added the Magnus Aja-Lif shown here Model No. 5, 450-lb capacity, 420-gal unit equipped with electric heater that maintains a satisfactory cleaning temperature of 139-140 deg. F. He still employs only one man to operate the two machines for cleaning a wide variety of parts in addition to transmissions.

Terminal View

The new Bend-Portland Truck Service terminal at Portland, Ore., is said to have everything from piped-in music and 2-way radio-dispatched pickups to hydraulic dockboards and "Freight-Rite" billing. The modern design of the new facility even includes this "picture window" to give the dispatcher a clear view of dock activities.





Tests automotive, truck, bus generators including the latest heavy duty, 220 ampere — 14 volt — oil cooled

PROVEN IN TWO YEARS OF FIELD TESTS

- Finger-tip speed control Remote controlled magnetic switches
- Belt or direct drive
- Thermostat controlled load bank

OPTIONAL model 1501 magneto test accessory group. model 1508 oil cooled A.C. generator test accessories.

WRITE FOR INFORMATION AND ILLUSTRATED BROCHURE

WEIDENHOFF CORPORATION

More details? Circle 206 on reply card inside back cover



(BOTH PREFER SPEED WASH) More trucks, buses and trains are washed with Speed Wash fountain brushes than any other. No wonder. With Speed Wash, one man does the work of two, faster, better, 100% Tynex Nylon turts will not mat er tangle, are securely anchored in waterproof block. Rust-resistant steel back firmly grips block. Lightweight steel handle is zinc-plated. Low cost head is easily replaced and is reversible. Mar proof rubber bumper.

OPERATORS

No. 250 ROUND 51/2" diameter back, 5' handle \$1245 COMPLETE Either Style Replacement Heads only

\$850

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GUARANTEE	0
GUAKANIEE	0
All our products	0
are fully avaran-	0
teed. Your money	-
recent rour money	_

Milwaukee Dustless Brush Co. 530 N. 22nd St., Milwaukee 3, Wis. Please ship the following: 240 Oblong Speed Wash.... 250 Round Speed Wash..... NAME STREET CITY.

SPEED WASH FOUNTAIN BRUSHES

More details? Circle 207 on reply card inside back cover

Mahon rolling / SAVE SPACE steel doors

SAVE SERVICE SAVE COSTS

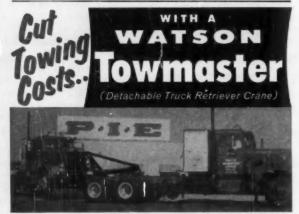
in sizes and types to fit your application

Rolling Steel Doors are the proven and best way of closing any type opening. For a plant, distribution center or loading dock—in new or remodeled facilities—Mahon has the right Door for the job. Rugged, easy operating, Bonderized (and synthetic baked enamel protected) Steel Doors, power or manually operated, will give you long, trouble-free service. If damaged, they are completely repairable by an experienced Mahon crew . . . service contracts available.

> Write for detailed 16-P Catalog G-60 or see Sweet's Files for full information.



THE R. C. MAHON COMPANY . DETROIT 34, MICHIGAN Manufacturing Plants—Detroit, Mich. and Los Angeles, Calif. Sales Offices or Representatives Located in All Principal Cities More details? Circle 208 on reply card inside back cover



Typical of the many nationally-known fleets using TOWMASTERS, Pacific Intermountain Express uses the WATSON TOWMASTER to retrieve even the heaviest "West Coast" type tractors. Saves on downtime-operator tows out a good tractor and the load is on its way as he returns to the shop with the disabled one. TOWMASTER Truck Towing Cranes can be attached to or removed from any tractor fifth wheel in 10 minutes or less. "Lift-off" winch makes it an easy one-man job. Has plenty of capacity for all highway breakdowns and most wrecks, too - even 3-axle rigs. Costs less than \$600.00-why pay more? Write for free catalog today. Please address Dept. 18.



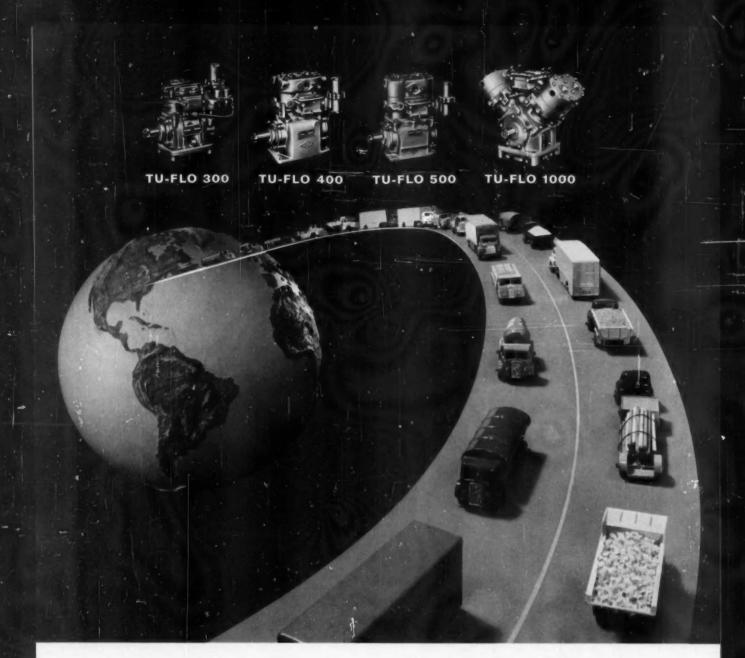
H. S. WATSON COMPANY 1316 - 67TH STREET, EMERYVILLE 8, CALIFORNIA 1606 LASKEY ROAD, TOLEDO 12, OHIO

More details? Circle 209 on reply card inside back cover



THE FACTS OF LIFE ABOUT AIR BRAKES. Many a perspiring parent has used the birds-and-bees routine to explain the facts of life. In case you've missed the facts of life about air brakes, we'd like to say that there's a real difference between makes. Quality differs. Performance differs. The companies that make them differ. That's why we ask you to consider all the facts of life about air brakes. When you do, we're confident you'll select Bendix-Westinghouse. Reason: Since 1923, we've manufactured to a quality and performance standard-not just to a price. This policy is your assurance you will continue to get most-value-per-dollar by specifying Bendix-Westinghouse Air Brakes-the product and name you can trust.

SPECIFY COMPLETE AIR BRAKE SYSTEMS BY Bendin-Westinghouse



Dependable in every kind of transport operation . . .

BENDIX-WESTINGHOUSE TU-FLO COMPRESSORS

Bendix-Westinghouse compressors have met the highest performance standards in hundreds of billions of miles of service on all kinds of commercial vehicles, over all kinds of roads, and in every conceivable weather. Over the years, more than 2½ million of these dependable units have provided consistently efficient braking power.

A TU-FLO COMPRESSOR TO MEET EVERY NEED:

• TU-FLO 300 for lightweight trucks and school buses. •
TU-FLO 400 most widely used by over-the-highway haulers. • TU-FLO 500 for city and interstate buses, off-the-road vehicles, and heavy-duty trucks. • TU-FLO 1000, new high-capacity unit, for stationary and mobile

air supply systems.

INTERCHANGEABILITY AN IMPORTANT SYSTEM ADVANTAGE: If your fleet includes many different makes of vehicles, you'll enjoy maximum air brake parts interchangeability if you specify Bendix-Westinghouse—because Bendix-Westinghouse is available as standard or optional equipment for every make of tractor and trailer on the market. Think what this interchangeability can mean to you in easier servicing and simplified parts inventory and bookkeeping.

So, for the best in air brake dependability, always specify Bendix-Westinghouse.

Bendin-Westingkouse





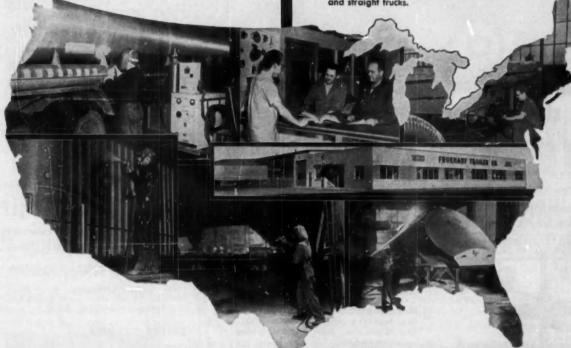
ONLY FRUEHAUF

Has <u>Complete</u> One-Stop Service Facilities

COAST-TO-COAST!

Only Fruehauf has truly nationwide service facilities coast-to-coast. And only your Fruehauf Branch can provide you with inspection and maintenance services tailored to your personal requirements! Over 70 Fruehauf Branches are strategically located to give your vehicles immediate attention. At all Fruehauf Branches you get these positive service advantages:

- * COMPLETE ONE-STOP SERVICE, low-cost parts replacement.
- ★ YEAR-ROUND PREVENTIVE MAINTENANCE PLAN for your fleet on a regular prearranged basis to assure I.C.C. compliance.
- ★ BRAKE SERVICE EXPERTS at every Fruehauf Branch ready to handle your braking problems on Trailers, tractors and straight trucks.



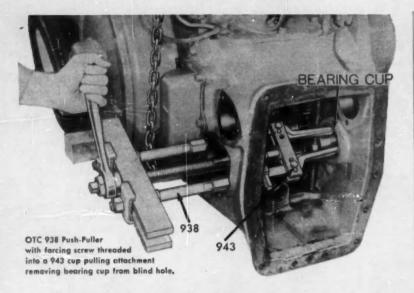


The Only Trailer Manufacturer With

Truly Nationwide Service!

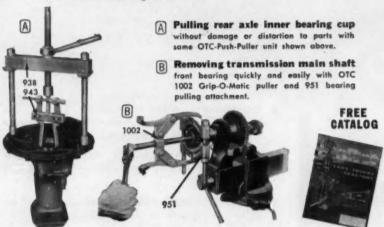
FRUEHAUF TRAILER COMPANY
10940 HARPER AVENUE . DETROIT 32, MICHIGAN

- → PROFESSIONAL AWAY-FROM-HOME SERVICE and emergency repair work at any Fruehauf Branch, with charges handled through your control branch.
- ★ UNIFORMLY HIGH QUALITY, FACTORY-CALIBER SERVICE performed by factory-trained mechanics and technicians.
- ★ COMPLETE PAINTING FACILITIES with your choice of air dry or baked finish for long lasting good appearance.
- EXPERT WELDING SERVICE for repair of any type equipment.
- CLEANING, BRIGHTENING AND PROTECTING PRO-GRAM—only one of its kind in the industry for aluminum, painted, stainless surfaces.
- ★ STEAM CLEANING OR SAND BLASTING for all Trailers, trucks, and tractors.
- * FRUEHAUF CREDIT PLAN for all major repair operations.
- ★ PLUS—lengthening, insulating, undercoating, lubricating, etc.



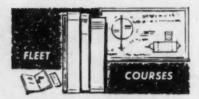
Save time, cut costs in removing and installing cups, bearings, gears, seals, pulleys, etc., with versatile OTC pullers

Save time, up profits by having the right tools in your shop to get the job done quickly, safely, easily - versatile OTC pullers with attachments. Manual or hydraulically operated . . . fit all makes of equipment. Complete hydraulic maintenance sets available in 171/2, 30 and 50-ton capacities.



Lee your OTC distributor or write for further information.





For addresses of sponsoring colleges, see page 308 of the November issue

DRIVER TRAINING

North Carolina State College (4-week th Carolina State College (4-week courses)—Feb. 27-Mar. 24; Mar. 27-Apr. 21; Apr. 24-May 19; May 22-June 16; June 26-July 21; July 31-Aug. 25; Sept. 4-29; Oct. 2-27; Oct. 30-Nov. 24; Nov. 27-Dec. 22.

FLEET SUPERVISOR

University of California, Los Angeles

University of California, Los Angeles (conference)—Mar. 6-7.
University of California, Richmond (conference)—Mar. 16-17.
University of Oklahoma—Mar. 21-23.
University of Maryland—Apr. 10-14.
University of Washington—May 1-5.
Northeastern University — May 8-12.
Florida State Dept. of Education, Miami—May 15-19.
Northwestern University—June 12-16.
Penn State University—Sept. 11-15.

Penn State University-Sept. 11-15. Ontario Safety League, Toronto Sept. 18-22.

FLEET MAINTENANCE

University of California, Los Angeles (conference)—Mar. 8-10. University of California, Richmond (conference)—Mar. 13-15. University of Washington-Mar. 20-

22

Ontario Safety League, Torento — Mar. 20-24. North Carolina State College—Apr. 10-14.

Penn State University — Apr. 24-28. Florida State Dept. of Education, Jacksonville—May 22-26.

DRIVER TRAINER

Ontario Safety League, Toronto -Apr. 24-28 Penn State University - Oct. 2-6.

TERMINAL MANAGEMENT

Purdue University-Feb. 21-23. Penn State University - Apr. 10-14.

FLEET OPERATION

Jacksonville Technical High School, Jacksonville, Fla. (evening) Mar. 6-Apr. 26.

TRANSPORT MANAGEMENT

University of Washington-Mar. 20-Purdue University-May 16-18.

ACCIDENT INVESTIGATION

Northwestern University-Mar. 13-31; Oct. 23-Nov. 10.

LP GAS TRANSPORT

Purdue University-June 21-22.



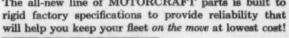
THIS IS THE BEGINNII

OF THE FINEST TUNE-UP JOB YOU'VE EVER DONE.

A MOTORCRAFT QUALITY IGNITION POINT SET THAT'S BUILT TO BACK UP YOUR BEST WORK WITH RELIABLE FLEET PERFORMANCE!

The all-new line of MOTORCRAFT parts is built to

That means better maintenance and lower operating costs in the long run! Here, for a umple, are a few reasons why MOTORCRAFT point sets are reliable.

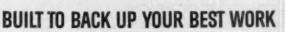


Two metal pieces, instead of one, are used for conductor and spring . . . in controlling breaker arm movement and electrical characteristics.



- Rubbing block is double-riveted to movable breaker arm, and secure fastening is further provided by rigorous endurance test that "bounces" the rubbing block time and again . . . much harder than in normal usage.
- MOTORCRAFT tungsten tigs are cut with a diamond wheel from the highest grade (99.3% pure) tungsten rod . . . only tungsten rod insures superior graining structure.
 - The stationary point is ventilated ... MOTORCRAFT points last up to three times longer than non-ventilated types.

And, throughout assembly . . . 21 gauges, including functional test equipment, are used to inspect the point assemblies. High quality control like this is typical of the manufacture of all the parts in the MOTORCRAFT line. It's a line designed, built, priced and available to suit your fleet requirements. MOTORCRAFT parts cover a wide range for electrical, ignition and carburetor tune-up and repair jobs, and are available from leading jobbers everywhere. Give your jobber a call—and ask about MOTORCRAFT's Quick Reference catalog.







SWENCH® Manual Impact Wrenches NOW AVAILABLE IN NEW

1/2" & 5/4" UTILITY SIZES

Small in size, the all new ½" and 5%" SWENCH manual impact wrenches are big in power when it comes to loosening tough, small "frozen" nuts and bolts.

Like the heavy duty SWENCH wrenches for industrial use, the new ½" and 5/8" sizes apply a tremendous wallop of torsional impact in automotive, light industrial, commercial, and utility use. Now a completely portable SWENCH can be taken to any job—big or small—for high speed, safe and easy removal of "frozen" nuts and bolts that previously had to be burned off or drilled out. SWENCH wrenches are economical too—they cost far less than other types of impact wrenches and save valuable man hours.

In addition to the new ½" and 5%" sizes, SWENCH wrenches are available with 34", 1", 1¼" and 1½" drives. Call your local industrial distributor today for a demonstration or write to:

Don't wrench it -SWENCH IT!

CURTISS WRIGHT

MARQUETTE DIVISION

1145 Galewood Drive, Cleveland 10, Ohio

AD NO 32 4

Highway Research Board . . .

discusses fuel taxes, subsidies, speed, accidents and improved design

Nearly 3000 scientists, engineers and public officials who attended the annual meeting of Highway Research Board last month heard many new views concerning the nation's transportation problems. Among more than 200 papers read, are these which will interest fleet managers:

- Gasoline taxes are a smaller part of the total cost of owning and operating an automobile today than in 1940, said a team from the U. S. Bureau of Public Roads. They also predicted further tax increases will not reduce sales of gasoline for use on highways.
- A Port of New York Authority economist said subsidies to city transportation systems are inevitable if officials expect their systems to serve peak-hour travel movements.
- Proper design of acceleration and deceleration lanes can almost eliminate accidents at expressway interchanges. The lanes should be at least 900 ft long and tapered. It was also found that all lefthand entrances and exits in the study had "poor accident rates."
- · Excessive speed is not a significant factor in automobile accident rates, said Harold L. Michael of Purdue University and Curt M. Elmberg, a Swedish consulting engineer. If every accident in which speed was the only violation could have been prevented, number of accidents would have been reduced less than 10 per cent. And if all accidents could have been prevented in which speed was the primary cause . . . the reduction in number of accidents would not have been much greater. They also found that "most drivers do not drive according to posted speed signs," but select a speed they consider proper, reasonable and safe for conditions prevalent, regardless of regulations.
- A Kansas study showed reflective white guide lines on edges of selected rural highways reduced deaths on those sections by 25 per cent—and reduced the overall accident rate by 14.3 per cent.
- Removal of street cars and loading platforms, imposition of parking regs. and changing signal timing on a Washington, D. C., street increased traffic volume by 47 per cent and increased the average speed from 17.8 to 19.2 mph.

NOW... MOTOR WHEEL Centrifuse 16½" AIR BRAKE DRUM is offered as standard or optional equipment by ALL HEAVY DUTY TRUCK & TRAILER MANUFACTURERS

Yes, it's unanimous! Motor Wheel's 16½" entrituse air brake drum is now available for all heavy duty trucks and trailers... offered as standard or optional equipment by all manufacturers.

Why is this important to truck operators? Because it is undeniable proof of the superiority of entrituse drums. With molten iron fused to a tough outer steel shell by centrifugal force, entrituse drums are the strongest, longest lasting brake drums made. And they're up to 25% lighter than comparable cast iron drums — that means bigger pay loads.

It's easy to see why Motor Wheel's entrituse drum has become the most specified brake drum. That's why you too should specify entrituse brake drums for your rigs. For further information see our distributor near you, or write direct for catalog 2560-1 which contains full specifications and application data.



WHEELS HUBS BRAKE DRUK



Serving the Automotive Industry Since 1903

MOTOR WHEEL CORPORATION

Lansing . Michigan

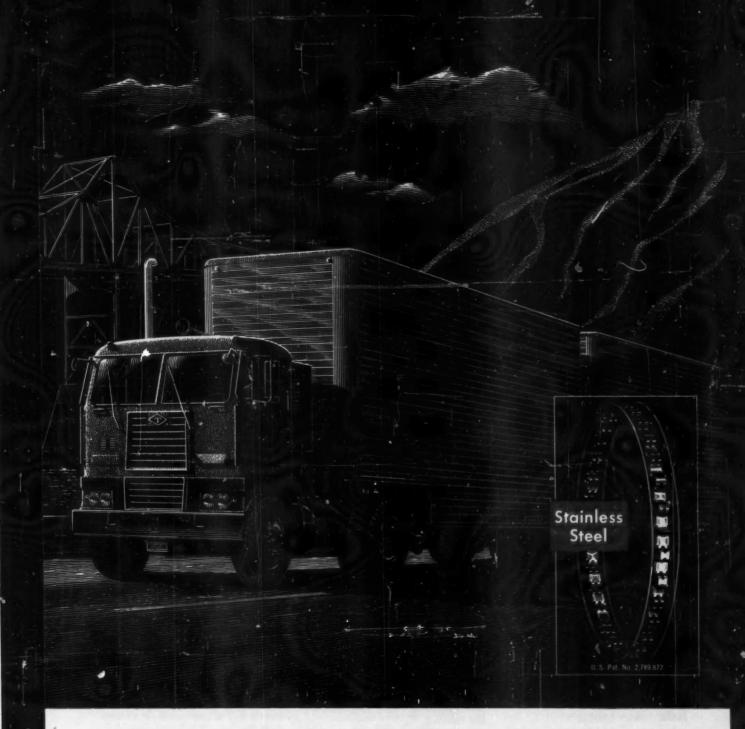
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1960 New Truck Registrations*

STATE		Brock- way	Chev- rolet	Dia- mond T	Dodge	Ford	G.M.C.	Interna- tional	Mack	Stude- baker	White	Willys Jeep	Willys Truck	All Others	Total
labama	Nov.		804 6,127	2 40	50 627	431 4,868	145	193 1,579	33 351	3 47	20 289	6 60	10 96	74 568	1,57
ánska	Nov.	*******	12 226	3	25	180	17	200	14	18	2		22	133	1,02
rizona	Nov.		319	12	78 844	207 3,356	79	75 835	18	10	3 82	112	25 217	27 602	11,47
rkansas	Nov.	********	4,194 553	1	47	324	1,125	101	1	5	8	6	3 44	16	1,18
alifornia	11 Mos. Nov.	********	6,126 2,878	13 17	519 416	5,074 2,043	1,375	1,450 534	42 13	67 55	72 27	51 64	94	487 6,966	7,24
olorade	11 Mos. Nov.		34,480	160	4,191	33,082 208	7,778	0,711 97	239	554	842 14 118	951 39 500	94 964 43	27	99
Connecticut	11 Mos. Nov.	3	4,997 154	19	788 24	4,124	1,323	1,217	56	108	118	14	419	318 55	13,98 54
Delaware	11 Mes. Nov.	16	1,674	30	369	1,553	539	1,041	161	87 1	252	114	255	680	6,74
	11 Mes.	12	681 52	10	148	822 28	191	414 22	153	41	85	10	31	98	2,36
District of Columbia	Nov. 11 Mes.	1	786	8	117	646	262	233	65 40	45 12	46 30	10 67	49 91	263 153	2,53
Florida	Nov. 11 Mes.		7,317	116	820	8,430	2.290	2,467	420	126	560	431	761 21	2,159	25,89
Beorgia	Nov. 11 Mes.	*********	787 7,997	50	1,000	7,967	2,043	2,605	399	126 24 145	40 370	103	164	958	23,86
lawaii	Nov. 11 Mos.		33 5'8	2	178	43 592	110	12 285	1	3	48	33	13 292	15 291	2,35
daho	Nov. 11 Mos.	*******	163	9	32 431	1,906	1,027	83 978	40	5 78	90	91	25 230	12	7,41
Ilinois	Nov. 11 Mes.		846 10,571	13 261	1,626	9,493	227	5,417	40 15 336	87 331	90 28 508	49 344	717	1,973	2,56
ndiana	Nov. 11 Mos.		551 7,115	4	91	263 5,858	142	186	336 23 393	44 307	508 44 458	120	22 303	1,036	1,40
owa	May	*******	299	84	1,093	158	1,895	132	1	4	1	11	10	44 533	13.57
Kansas	11 Mos. Nov.		4,673 541 6,375	51	555 41	3,811 303 5,292	1,053 100	2,427 151	47	11	78	95	24	15	1,19
Kentucky	Nov.	********	450	25 2	643 42	192	1,574	1,858 118	12	99	72	73 10	199 15	248 37 385	16,47
Louisiana	11 Mes.		4,841	15	458 55	3,630	1,158	1,574	103	50 7	155	122	184	42	12,6
Maine	Nev. 11 Mes. Nev.		6,727	31	415 18	8,055 104	1,278	1,554	129	. 80	133	102 10	110	966 30 308 56 554 128	17,2
	11 Mes.	18	1,482	4	196	1,588	526	1,017	53	47	18	126 12	257 25	308	5,6
Maryland	Nov.	53	3,189	26	57 592	162 2,963	79 678	1,630	206	33	251	222	398	554	10,7
Massachusetts	Nov. 11 Mos.	11 66	325 2,871	30	52 700	3,322	1,256	1,862	20 299	67	28 359 31	18	398 60 862 92	1.100	1,1
Michigan	Nov.	16	1,132 12,147	95	2,190	678 11,060	3,998	3,002	14 218	26 196	31 445	63 447	92 805 15	138 1,784	3,0
Minnesota	Nov.	4	376 8,280	3 82	72 777	233 4,681	99 1,215	2,257	5	110	122	71	15	25 531	15.4
Mississippi	Nev.	minner	517	1 7	55 411	379	151	156	95 13 76	22 83	1 32	6 57	194 16 73	21 279	1,3
Missouri	. Nov.		4,941 636	8	61	315	158	202	12	7	7	10 112	207	44	23,2
Montana	11 Mos. Nev.	********	8,892 155	63	951 30	6,628 80	2,480 54	2,985 87	106	115		111	38 332	520 12	4
Nebraska	11 Mos. Nov.		2,057 322	20	403 42	1,912	620	1,025	44	48	62	106 10	15	244 18	6,8
Piovada	Nov.		3,984	46	363	3,522 48	908	1,805	134	48	133	107	218	361 5	11,6
New Hampshire	11 Mos. Nov.	3	711	3	190	703 46	390	409	9	38	13	56 13	97 21	197 27	2,8
New James	11 Mos.	10	888 499 5,439	28 11	164 101	954 370	264 140	851 274	152 44	19 7	53 37	108	221 77	319 126	3,7
New Market	11 Mas.	184	5,439	147	1,170	6,334	2,087	2,965	596	90	892	30 276 13	701	1,638	22,3
New Mexico	Nov.	********	3,518	4	379	182 2,672	960	585	23	73	41	133	153 192	153	8.7
How York	Nov.	44	1,169	152	2,333	12,024	334 3,982	907 8,761	1,153	73 85 211	1,495	115 931	1,743	237 3,346 52	48,3
North Corolina	Nev.		7,285	28	120 888	7,931	1,839	2,097	10 257	19	21 348	187	19 226	705	21.0
North Dakota	Nov.	*******	1,595	14	19	1,389	23 338	960	2	24	2	13	38	3 52	4,6
Ohie	Nov.	3 29	934	121	183	536 9,610	260 3,304	415 4,763	38 501	22 237	54 970	64 483	75 924	130 1,711	2,7
Oklahoma	Nov.		940	2	64	510	178	160	10	7 91	12	12 73	15 119	25 237	1,9
Oregon	Nov.		8,450	13	800 17	6,582 147	1,602	37		. 8	14	8	33	35 1,018	15,0
Pennsylvania	11 Mos.	11	4,516 728	19	727 187	4,017 475	1,708	1,423 376	122	236	612 49	183	33 453 168 1,674	138 1,688	2,6
Rhode Island.	Nov.	170	9,650	223	2,538	9,292	2,858	5,415	1,338	253	941	909	4	23	1
South Caroling	11 Mes.	3	435 271	3 2	106	772 193	128 68	313 72	78	14	32 16	16	50	311	2,2
South Daketa	11 Mos.		3,709	1	466	3,235	765	917	104	26	116	74 5 47	87	371	9,8
	11 Mes		1,854	22	305 58	1,605	26 454 110	1,230	16	46	23 10	47	168 12 151	130 14	8.0
Tennessee	111 Mos.		5,944 2,637	19	648 205	5,194	1,613	1,8:5	324	85	281	123	151	385	16,5
Texas	111 Mes	. 1	30,681	73	2,172	5,194 1,450 20,949	4,657	6,474	356	314	36 816	69 543	39 442 10 118	90 1,580 21	80,0
Utah	11 Mes		2,003	19	34 408	1,913	771	631	33	28	88	9 90 12	118	193	6,
Verment	Nov.		56	1	8	865	16 251	359	63	24	33	127	214	28 254 81 880 41 768 28 297	2,1
Virginia	Nov.		406		104 137 961	291 4,926	108	198	329	10	25 218	23 205 12	88	81	2,1 1,4 16,3
Washington	Nov.		389		75	308	201	156	2	18	6	12	41 313	41	1 1 2
West Virginia	Nov.		179		675 26	4,220 100	58	96	100		136	33	47	28	14,
Wiscensin	Nov.		. 442	2	427 82	2,014	152	164	13	10	108	83 328	78	80 763	1.3
Wyeming	111 Mos		4,992	65	677	4,115	1,842	3,068	102	103	195		480	783 4 153	18,
Total Nove	mber, 1966		24.876	133	3.595	15,83	6,410	8,455	706	689	787	1,101	1.804	2,997 3,649 41,032	67.
Total Nove	mber, 1956 onths, 1966	108	17,890 291,173	254 2,315 2,735	4,015 40,086 49,267	26,752 258,406 271,300	5,067 78,584 0 65,596	10,520	1,050 10,147 12,53	5,410	1,239	1,001 10,125 9,256	2,057 17,828	41 032	73 870

*Compiled from efficial state records. Data property of R. L. Polk & Co

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SEALED POWER STAINLESS STEEL OIL RINGS Trim truck down-time...cut cost of maintenance



Trucks with Sealed Power Stainless Steel oil rings earn more. They're out on the road working—not tied up in the shop.

Why? Because Sealed Power rings have a unique, patented design combined with Stainless Steel, the modern "miracle metal." These rings resist wear, give engines longer life.

Other advantages? Plenty. Sealed Power

Stainless Steel oil rings hug cylinder walls to control and conserve oil while reducing sludge and carbon deposits. They hold their fit, retain tension—even in out-of-round bores. And Stainless Steel can't rust or corrode.

Up your profits by cutting your costs. Use Sealed Power Stainless Steel oil rings. Sealed Power Corporation, Muskegon, Michigan.

Sealed Tower Stainless Steel piston rings stop oil pumping VISIT OUR BOOTH NO. 2456-7-8-9 AT THE I.A.S.I. SHOW IN LOS ANGELES, FEBRUARY 17-19, 1961

More details? Circle 216 on reply card inside back cover

February News Roundup

1960 Domestic Truck Factory Sales by GYW

Month	6,000 lb. and less	6,001- 10,000 lb.	10,001- 14,000 lb.	14,001- 16,000 lb.	16,601- 19,500 lb	19,501- 28,000 lb.	26,001- 33,000 lb.	Over 33,000 lb.	Total
January	51,988	14,438	1,111	2,662	15,484	4,985	2,934	2,566	96,178
February	57,488	15,266	986	2,402	13,471	6,084	3,299	3,309	102,305
March	58,878	15,714	988	2,611	13,261	6,715	3,768	3,502	105,438
April	48,780	14,963	881	2,302	12,282	6,182	3,769	3,408	92,557
May	48,216	13,739	900	2,284	13,646	6,073	3,186	3,214	91,268
June	48,021	12,990	865	2,403	12,826	5,999	2,930	2,988	89,022
July	30,861	9,833	710	2,284	10,278	5,166	2,420	2,504	64,053
August	25,995	8,456	820 715	2,484	8,418	3,686	1,990	1,782	53,331
September	35,941	9,110	715	1,946	10,522	3,848	2,064	1,860	86,006
October	34,849	9,029	933	1,490	7,584	3,174	1,721	1,800	60,589
November	45,023	11,168	833	1,607	9,109	2,952	1,735	1,496	73,923
11 Mes. 1980	486,050	134,698	9,443	24,485	126,878	54,884	29,816	28,438	894,670
11 Mos. 1969	430,482	135,345	11,816	75,801	101,962	52,317	36,841	33,367	877,731

Source: Automobile Manufacturers Association.

Railroad's troubles are own fault Firestone named to transport committee

IHC again supports ATA Foundation GMC adds engine options

Transport course scheduled for June

Transport nationalization possible, says TAA

Bendix consolidates automotive sales
Diesels grow in small trucks
Simon to head fleet training
Truck rates under study
GM offers electrical course
SAE discusses new ideas in vehicles

Ton-mile tax plan for "piggy back"?

Trailer makers convene

HOLLYWOOD, FLA. — Truck Trailer Manufacturers Assn., meeting here early this month, heard among others ATA President John J. Gill in his annual address and R. A. Hammond of E. I. du Pont discussing rigid urethane foams for trailer insulation.

Private Truck Council discusses cost cuts at annual meeting

DALLAS, TEX.—Private Truck Council of America, Inc., used the theme "Cutting Costs through Practical Controls" for its annual convention here early this month.

Nominate now for Dow Award

CHICAGO—Nominations for the annual Marcus A. Dow Memorial Award for fleet safety may be made between now and April 1. Sponsored by the National Safety Council (425 North Michigan Ave., here) in cooperation with The Greyhound Corp., the awards annually honor an individual of professional achievement in the field of motor transportation safety engineering. The award consists of \$500 and a plaque.

ICC exempts Hawaii

WASHINGTON, O.C.—Interstate Commerce Commission has exempted motor carriers operating in Hawaii from federal regulation under the IC Act. The ruling in Ex Parte No. MC-59, was based on the reasoning that such regulation would serve no useful purpose.

Railway Express gets new name

NEW YORK CITY—Railway Express Agency got a new name last month—REA Express. Main reason: To put more emphasis on the "express" nature of the service, remove the "rail" emphasis. REA Express now prides itself on using all means of transportation—truck, bus, ship, airplane and railroad.

Armstrong gets highway PR job

WASHINGTON, D.C.—New president of the Better Highways Information Foundation is Ellis L. Armstrong. He has been Commissioner of Public Roads, Dept. of Commerce. BHIF, located at 2000 K St., Washington 6, D.C. has undertaken the job of supplying public information on the need for better highways.

Sun offers instrumentation course

CHICAGO-Sun Electric Corp. is of-

fering instrumentation test courses in 16 cities across the country. Covered are battery and starting system, ignition, distributors, compression, fuel systems, carburetion and charging. Cities include Chicago, New York City, Buffalo (N.Y.), Pittsburgh (Pa.), St. Louis (Mo.), Memphis (Tenn.), New Orleans (La.), Atlanta (Ga.), Oklahoma City (Okla.), Dallas (Tex.), Milwaukee (Wis.), Philadelphia, Minneapolis (Minn.), Kansas City (Mo.), Seattle (Wash.) and Portland (Ore.).

Driver school seeks location

WASHINGTON, D.C.—Regular Common Carrier Conference of ATA is considering establishing its William Way Memorial Driver Training Program at a permanent location. Since the program's start in March 1959, seven courses have been held in five different cities with 165 graduates. The Conference would like to hear from fleets as to what their driver training needs are. Write: Regular Common Carrier Conference, ATA, 1616 P St., N.W. Washington 6, D.C.

Snead buys Chicago Express

KEARNY, N. J.—J. L. S. Snead, president of J. L. S. Transport Corp. has bought all common stock in Chicago Express, Inc. Snead paid Harold D. Gorman, founder of Chicago Express, between \$2.5- and \$3-million for the firm. CXI reported gross revenues of more than \$15.5-million in 1959 and presently operates 21 terminals in the East and Midwest. Snead recently resigned as president of Consolidated Freightways.

Frantz says end "Cold War"

PORTLAND, ORE.—A prominent trucking leader called for an end to the "cold war" in transportation, particularly between the railroads and the (TURN TO PAGE 195, PLEASE)



USED or NEW-which should I buy?

Deciding between a used and a new truck means weighing many factors. But generally, it depends on the job and it depends on the make.

Many purchasers of used vehicles have a particular job in mind that doesn't require a new vehicle—stand-by service . . . in-and-around-town service . . . yard work. For this group, the higher price of a new truck is usually not warranted.

A second group—and this one is growing—is buying used Mack trucks for all kinds of service in preference to new "lower cost" trucks of other makes. They know that a good used Mack, even two or three years old, can be depended upon to give them longer life, economy and trouble-free performance.

Either group is in a position to benefit from the current trend among many larger fleets toward trading in sooner on newer, weight-reduced, shorter Mack models to take advantage of weight and length liberalization in many states.

Both groups benefit by being able to select from a wide variety of Macks and other good used trucks that have been traded in on new Aluminum-Light Macks. Most trade-ins are from large, well-maintained fleets so that the used Macks have maximum profitable mileage ahead of them.

Because your Mack representative takes more trucks in on trade, and because he insists on thoroughly checking them, you can be sure that he has the truck suited to the job you have in mind.

That's why it pays to make Mack your Used Truck Headquarters. You're sure of getting a dependable, high-value used vehicle at a fair market price—a truck

with maximum service ahead of it . . . one that will outperform new "lower cost" trucks. So if you are in the market for a truck—used or new—see your Mack representative first. Mack Trucks, Inc., Plainfield, New Jersey. Mack Trucks of Canada, Ltd., Toronto, Ont.



COMMERCIAL CAR JOURNAL, February, 1961

More details? Circle 217 on reply card inside back cover



"Now I can reach any of my drivers...anywhere ...anytime!"

YOUR BUSINESS, TOO, CAN PROFIT FROM MOTOROLA 2-WAY RADIO CONTROL

Here's how it cuts costs...

Your drivers are routed directly from job to job no time wasted phone-hunting, parking and phoning in—no miles wasted backtracking or "deadheading". This is a proved fact: Your savings will more than pay for your Motorola system!

Here's how it builds sales . . .

Your drivers will make more calls per day—and you'll get new sales because Motorola dispatched service makes salesmen out of customers. You'll find it's profitable to say, "He's on his way," with Motorola 2-way radio.

See for yourself—Your Motorola man will show you a nearby system in action. He'll show you proof of Motorola efficiency and dependability. Call today. See your local Yellow Pages under "Radio Communications".



Motorola . . . the communications specialist to industry for nearly three decades

MOTOROLA 2-WAY RADIO

Motorola Communications & Electronics, Inc., 4501 Augusta Blvd., Chicago 51, III. • A Subsidiary of Motorola Inc. • SPaulding 2-6500

More details? Circle 218 on reply card inside back cover

February News Roundup

Continued from page 192

trucking industry, and the rails and waterways carriers. The bid for closer cooperation between transport modes was made by Welby M. Frantz, of Terre Haute, Ind., before the 27th annual convention of the Inland Empire Waterways Assn. at the Hotel Multnomah here.

"The most essential ingredient for a strong national transportation system is an ending of the cold war between carriers.... The rate structure," Frantz pointed out, "instead of being utilized to provide adequate revenue for service performed, has instead become a weapon with which to attack the solvency of a competitor. This is particularly vicious and effective where the competitor is a relatively small business operation."

Railroad's troubles are own fault

ST. LOUIS, Mo.—Railroad claims that the nation's motor carrier industry is the source of their present difficulties are not borne out by the record, it was charged here by the president of the American Trucking Assns. John J. Gill, Providence, R.I., in an address before the Missouri Bus and Truck Assn. annual meeting at the Chase Hotel, declared that "railroads say they are in trouble, but the record shows there has hardly been a period in their history when they weren't."

Referring to the railroads' frequent trips to Congress to request legisla-(TURN TO PAGE 196, PLEASE)

Honored Outlaw

J. Thomas Outlaw, executive vice president of the North Carolina Motor Carriers' Assn., was recently honored in his state as "Tar Heel of the



Week." Although he is not a truck operator, he has been responsible for many improvements in the trucking industry in N. C. Some of his works to date include: Organization of a 13-point safety program; set-up of truck driver training program at State College in 1949; origination of N. C. Truck Safety Patrol; organization of N. C. Motor Truck Rate Bureau. He has served as executive vice president of NCMCA since 1946.

TRUCK CLEANING IS FAST...
EFFECTIVE...ECONOMICAL

Orrin W. Fox — GMC Truck Dealer — in Pasadena, California, uses the Clayton BLAST-MASTER "280" daily for pre-service truck cleaning.

with Clayton's

BLAST-MASTER "280"

STEAM CLEANER

The toughest cleaning jobs become easy...with Clayton's BLAST-MASTER "280". This heavy duty cleaner delivers 280 gallons per hour of high impact steam vapor cleaning solution. Removes waterproof greases, baked-on oil, tars and all forms of dirt found on engines, trucks, trailers and other heavy equipment.

The Clayton BLAST-MASTER "280" is economical to use...its high thermal efficiency saves hundreds of dollars annually in fuel consumption costs. In addition, the famous Clayton 10 Year Gold Bond Warranty provides full protection against costly maintenance.





February News Roundup

Continued from page 195

tion against the trucking industry as a solution to their problems, Gill indicated his belief that much of the rail difficulty can be traced to self-delusion. "If you insist on calling the doctors often enough for a perfectly healthy human being, he is almost certain to develop some kind of ailment—even if it is only mental," he said.

Firestone named to transport committee

EVANSTON, ILL.—Named to the advisory committee of the Transportation Center at Northwestern University here was Raymond C. Firestone, president of the Firestone Tire & Rubber Co.

IHC again supports ATA Foundation

CHICAGO—For its eighth consecutive year, International Harvester has made a \$50,000 grant to the ATA Foundation. Money will be used for advertising in national magazines relating the contributions by the nation's fleets to the nation's economy.

GMC adds engine options

PONTIAC, MICH.—Two more engine options have been added to GMC's light and medium-duty truck line. The "D" version of the 305-cu. in. V6 gasoline engine, rated 165 hp. is now offered on truc's in the half through 2-ton range. Second new choice is the 210-hp, 401-cu in. V6 gasoline engine. It's offered on 5000 Series trucks normally powered by the 180-hp, 351-cu in. V6.

Transport course scheduled for June

STANFORD, CAL.—Stanford University has scheduled its Transportation Management Program for 1961 from June 25 to July 22. The middle-management executive training 4-week program will have an increased emphasis this year on electronic data processing in relation to transportation management. For further details, write Karl M. Ruppenthal, Director, Transportation Management Program, Stanford University, Stanford, Cal.

Transport nationalization possible, says TAA

WASHINGTON. D.C.—Is sentiment for nationalizing transportation growing? (TURN TO PAGE 198, PLEASE)

SAVE HOURS -KNUCKLES



RATCHETING SPARK
PLUG SOCKET. Replaces three tools.
Makes possible torquing of plugs in accessory-packed cars.

FILLER PLUG WRENCH.
Speeds, eases removal
of Ford and Mercury
differential hex filler

IMPROVED HOSE
CLAMP PLIER. Features special finger tip position lock that frees both hands.

J-42 S1.11

Ho, 175 52,78

Na. 252 S1.37

TWO-IN-ONE SOCKET.
Step-dewn opening
services both stop light
and oil pressure light
switchs. Will not break
switch seal.

CHRYSLER EMERGEN-CY BRAKE ADJUST-MENT WRENCH. Only tool needed for internal emergency brake adjustment on all Chrysler-make cars.

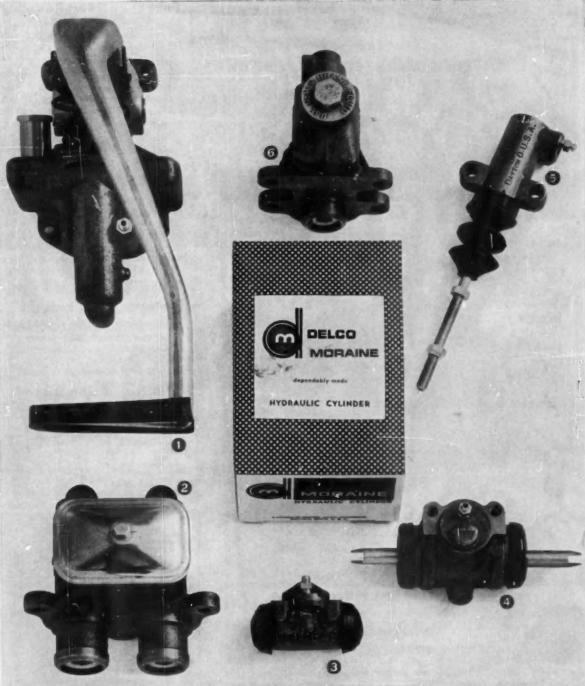
BENDIX BRAKE TOOL. Both ends designed to adjust all type Bendix brakes. Extra long!

SHOCK ABSORBER
TOOL. Three tools in one. Insures quick installation-removal of shocks on all General Motors, Ford and Chrysler-make cars.



More details? Circle 262 on reply card Commencial Car Journal, February, 1961

More details? Circle 261 on reply card



How Delco Moraine Simplifies Brake Service

 Vertical Mount Master Cylinder

400

- Clutch-Brake
 Master Cylinder
- Wheel Cylinder: Cars
- Wheel Cylinder: Trucks
- Clutch Cylinder
 Meeter Cylinder
- Master Cylinder: Cars, Light Trucks

Delco Moraine meets brake service needs with parts and full assemblies that can immediately be used to replace original equipment units. All are made to original equipment specifications; all are protection-packaged for easy stocking, quick identification. A quarter-century of experience in the manufacture and maintenance of brake systems is your assurance of satisfaction. Deico Moraine original equipment brake parts are used in more than 31 million vehicles on the road today. All Delco Moraine brake products are readily available through General Motors car and truck dealers and the United Motors System.

DEPENDABLY MADE Division of General Motors, Dayton, Ohio



YOU CAN'T BEAT THIS BARRETT TEAM for SUTTING MAINTENANCE COSTS

The DRUM-Dokter and BRAKE DOKTER provide Precision matched braking surfaces B-900UPT "Big B" DRUM-Dokter for longer Super Duty DRUM-Dokter ... brake machines, grinds truck, bus and passenger car drums quickly life and profitably. Fast and easy to operate only 4 controls for operation of a carriage. The BRAKE DOKTER . . . a spindle mounted lining surfacer, precision fits brake lining to brake drum on the vehicle, adding miles to reline job. B-120C **Brake Dokter** Write for Details or a **Demonstration**

W-2

BARRETT EQUIPMENT CO. 2101 CASS AVE., ST. LOUIS 6, MO

Branch Operations Miami, Fla. — Los Angeles, Calif. — Cleveland, Ohio Export Springfield, III. — Canada - Toronto — Montreal — Edmonton -

February News Roundup

Continued from page 196

Transportation Assn. of America points to a recent editorial in the normally conservative Boston (Mass.) Sunday Herald urging nationalization of railroads.

Bendix consolidates automotive sales

DETROIT—Bendix Corp. will market all its automotive replacement products under one new organization—Bendix Automotive Service. It will handle—for fleet sales—brakes, power brakes, power steering, brake lining, fuel pumps, carburetors, filters, universal joints, ignition systems, starter drives, radio receivers, two-way radio as well as many other automotive parts and components.

Diesels grow in small trucks

NEW YORK CITY—"The diesel is find-(TURN TO PAGE 200, PLEASE)

1960 Truck Trailer Shipments

Vans	Type of Trailer	November	Eleven Menths
Furr SI All of All of SI All Open	lated and refrigerated	380 42 348 56 38 18 1,454 496 956 103 30 73	5,114 683 4,431 1,787 1,553 244 23,846 6,129 17,728 2,470 704 1,786
	Total-Vans	2,003	33,226
	- and low-pressure stroteum Carbon and alloy steel Stainless steel Aluminum,	84 7 104	1,408 216 1,501
	Total-Petroleum	195	3,215
CI	hemical, feed, fluid selids ii other, incl. aircraft	24	663
Hiel	refuelers	62	1,046
ch	emicals, etc	58	356
	Total—Tanks	339	5,280
Sing	sipe and logging jie axiedem axie	11 30	208 725
	Total	41	930
Gra	rms ks, livestock and stake in bodies, all types ferms (flats), all types	67	428 1,677 7,813
	Total-Platform	563	9,418
Dump	ed-heavy haulerstrailers	75	1,966 1,374 3,120
	Total-Complete Trailer	8 2,367	55.334
	trailer chassisr chassis only		725 2,634
	Total-Trailers and Chassi	3,465	58,691
Detac	hable Van Bodies	******	2,570

Source: Industry Division, Bureau of the Census.



says W. A. Robertson, Supt. of Transportation for John Labatt Limited

"Before the Gates Tandematic Drive was installed," Mr. Robertson says, "our units were being constantly held up in the Northern Regions. Bad weather and slick roads, both in the United States and Canada, caused costly tie-ups and disruption of our schedule. Increased traction through installation of the Gates Tandematic Drives has eliminated these delays."

"Further, an important saving has resulted from the fact that our tire mileage on Tandematic with one driven axle has been stepped up from less than 60,000 to 120,000 miles.'



Gates **Tandematic** Building the future on 50 years of progress

New Gates Power Matching concept boosts tire life even higher!

For years, Gates Tandematic Drives have provided fleet owners such as Labatt with big dollar savings through increased tire mileage.

Now, Power Matching-Gates new concept in Tandematic Drive operation-results in even longer tire life. Fundamentally, Power Matching is a way of equalizing traction between tandem axles. The key to Power Matching is high belt tension ... exclusive with Gates Tandematic Drives.

After millions of test miles, using Gates new Power Matching system, fleets report their tire mileage has increased an additional 45% to 53%.

For detailed information, showing exactly how Gates Tandematic Drives, plus POWER MATCHING, can save you money by increasing your tire mileage, contact Joe Bradley, Automotive Sales Division,

The Gates Rubber Company, Denver, Colorado TPA 1010

Gates Rubber of Canada Ltd., Brantford, Ontario

199



"WE USE LUBRIPLATE LUBRICANTS IN TEMPERATURES DOWN TO -60°F"

says UNITED KENO HILL MINES LTD. of Whitehorse Y. T. (Canada)

To further quote Mr. W. C. Whitehouse, the mechanical superintendent of their Transport Division, "We are using LUBRIPLATE Lubricants in engines, transmissions, final drives and wheel bearings of all our machines. Six LubriPLATE products satisfactorily lubricate all our equipment both Wirter and Summer."

W.C. Whitehouse, Mechanical Superintendent

TYPE OF YOUR MACHINERY, LUBRIPLATE GREASE AND FLUID TYPE LUBRICANTS WILL IMPROVE ITS OPERATION AND REDUCE MAINTENANCE COSTS.

LUBRIPLATE is available in grease and fluid densities for every purpose . . . LUBRIPLATE H. D. S. MOTOR OIL meets today's exacting requirements for gasoline ard diesel engines.



For nearest LUBRIPLATE distributor see Classified Telephone Directory. Send for free "LUBRIPLATE DATA BOOK" . . . a valuable treatise on lubrication. Write LUBRIPLATE DIVISION, Fiske Brothers Refining Co., Newark 5, N. J. or Toledo 5. Ohio.



More details? Circle 263 on reply card

February News Roundup

Continued from page 198

ing a definite place today in small trucks ranging from 15,000 lb GVW to 40,000 lb GCW," J. C. Campbell of GMC's Detroit Diesel Engine Division told members of the Metropolitan section of the Society of Automotive Engineers in a paper presented here last month. It was illustrated with several examples of diesel conversions featuring GM's 53 Series engines.

Simon to head fleet training

WASHINGTON, D.C.—National Highway Users Conference Safety Director William J. Simon is new chairman of the National Committee for Motor Fleet Supervisor Training. Elected at the same time was American Trucking Assns. Safety Dept. Director Goley D. Sontheimer as vice chairman, and Pennsylvania State University Institute of Public Safety Administrative Head Amos E. Neyhart as secretary.

Truck rates under study

CHICAGO—Under study this year are intrastate rates in Michigan and standard costs for trucking operations. It's being carried out by A. T. Kearney & Co., transportation management consultants located here. First phase has been to develop a cost determination formula.

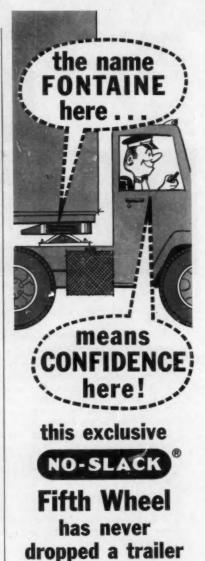
GM offers electrical course

DETROIT—GM's United Motor Service offers fleet service men a 40-hr course in Delco-Remy heavy-duty electrical equipment. They'll be held at GM training centers. For details and dates, contact your local UMS distributor or wholesaler.

Auto rental grows fast

NEW YORK CITY-Vehicle rental is the nation's fastest growing service according to Census Bureau data. Members of New York Car and Truck Rental and Leasing Assn. heard Howard R. Smith, CATRALA's national executive secretary, quote Census figures showing that vehicle rental services had a growth rate three times higher than the average of all special services. He reported that between 1954 and 1958 the business census showed a rental business gain of 110.7 per cent. He forecasted that vehicle rental services would gross three-quarters of a billion dollars for

(TURN TO PAGE 204, PLEASE)



For twelve consecutive years this Fontaine NO-SLACK Fifth Wheel has maintained a perfect safety record, and at the same time has climbed to FIRST PLACE in industry sales! The rugged construction and the patented NO-SLACK Lock are the features that have made this enviable record. If you want a Fifth Wheel that will give long service, will never lock out a trailer, will automatically take up slack and adjust for wear. . . and will inspire driver confidence, then buy Fontaine!

Sold nationally through all major truck manufacturers and dealers. Write for a FREE Catalog.



More details? Circle 264 on reply card



You spot quality throughout the minute you put a Sealed Power part on the bench

Take sleeve assemblies, for example—

Flange relief on the sleeve

This undercut allows a finer finish in the flange area and truer, more uniform flange width.

Uniform wall thickness = Properly install a Sealed Power sleeve in a rebored block. "Mike" it. Perfectly round every time because of the special Sealed Power finishing process which assures uniform wall thickness. No costly honing.

Fine cross-hatch finish on ID a Scientifically developed to aid quick ring seating. Because of the uniform wall thickness, this finish is never destroyed by honing. More costly ground finish on the OD to assure virtually 100% contact with the cylinder wall.

Chamfer •
A precision chamfer on both the
OD and ID to assure easy installation into the block.



Piston Features

Special Cyclan iron compression rings or other heavily chromed rings for long life. Compression rings are factory-lapped for instant seating. Heavy-duty oil rings or Sealed Power's phenomenal, patented stainless steel oil ring.

GI-60 Top Groove Insert a heat-treated, spring steel shield. It becomes an integral part of the piston, adds tens of thousands extra miles of life.

Special factory finishes to eliminate piston scuffing during break-in. Reinforcing metal where it counts and special constructions, including forged aluminum.

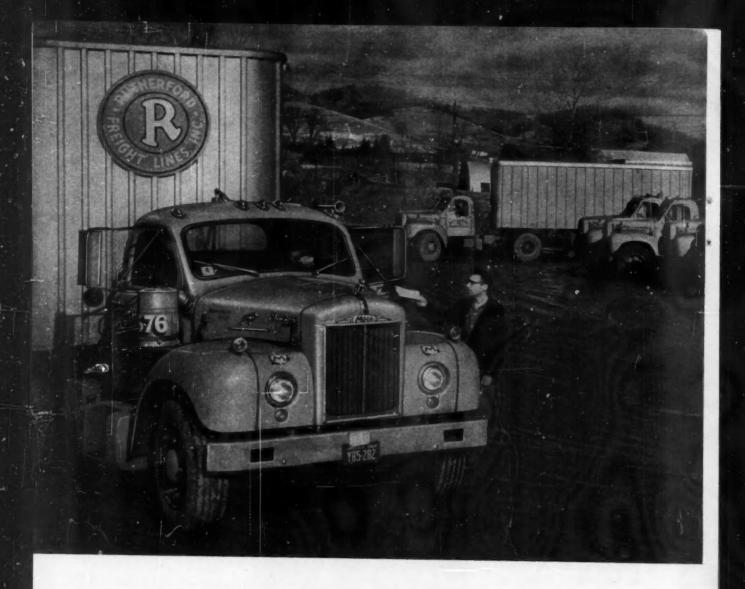
A unique method of finishing the piston pin hole and pins. These are held to extremely close tolerances to assure practically 100% bearing for longer life.



Sealed Power Motor Parts

SEALED POWER CORPORATION . MUSKEGON, MICHIGAN

Preferred Performance



These 5-year-olds have been trouble-free for 350,000 miles



Sixty-odd Macks make up Rutherford's fleet, but because they are constantly on the go, only this handful of B Models could stand still long enough to have their picture taken.

"Twenty-seven of our Macks have been in active service since 1955. Outside of routine maintenance, such as relining brakes, they have all been trouble-free. They've averaged over 350,000 miles and still give us 7 miles per gallon," says Mr. R. McInturff, President of Rutherford Freight Lines, Inc., Bristol, Va. "That's why we're sold on Macks."

Rutherford's Mack tractors haul freight throughout the South... are a familiar sight on the routes between more than 20 terminals from Richmond to Atlanta. Each highway unit puts on 80,000 miles a year, much of it on mountain hauls.

When you buy a Mack, you get undivided responsibility. Undivided, because Mack practices Balanced Design, an exclusive Mack engineering concept assuring that every major component in a Mack is built by Mack to operate with every other as a strong, sweet-running unit. In this way Mack not only controls the quality of its components, but can be sure its components will work in harmony...for the

highest possible efficiency and longer mileage life.

The combination of Balanced Design and famous Mack Thermodyne* engines—gasoline or diesel—assures top-notch performance and unequaled economy on the jobs ahead. They are the reasons Mack trucks have long been recognized as the industry's leaders in power, performance and economy for every important hauling job.

Investigate the use of Macks in your fleet. Your Mack branch or distributor can provide the model that best meets your needs. Mack Trucks, Inc., Plainfield, New Jersey. Mack Trucks of Canada, Ltd., Toronto, Ontario.

MACK FIRST NAME FOR RUCKS



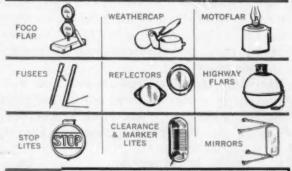
More details? Circle 224 on reply card inside back cover



LOWEST COST DOUBLE BULB PROTECTION ON THE MARKET

- Slim line design almost 25% narrower than other popular lights, fits more applications.
- Shockmount S700 equipped with 5000 hr. bulbs, typical of Anthes quality.
- 3. Rubber ring seals lens against dirt and moisture.
- Snap-on lens means quick, easy bulb replacement.
- Plate is mounted on rubber grommets for complete moisture seal in mounting area.
- You can save money now because this maintenance-free light will fit mounting holes for most popular marker lights.

Cinthes... the answer to ALL safety equipment





GLEASON CORPORATION ANTHES DIVISION

325 N. PLANKINTON AVE. MILWAUKEE 2, WIS.

February News Roundup

Continued from page 200

SAE discusses new ideas in vehicles

DETROIT — Society of Automotive Engineers met here last month for its new, big annual meeting—the International Congress and Exposition Automotive Engineering. Reports and exhibits covered new ideas available today, just around the corner and way into the future. Of special interest to fleetmen, were . . .

• Announcement of twin-cylinder hydraulic brakes for tractor-trailer combinations by Bendix Corp. Check What's New in Vehicle Accessories in next month's issue for full details.

 Results of durability tests on Ausco's oil-cooled disc brake (Dec. '59, page 124). Tests with a 57,300-lb-GCW

rig indicate a 300,000-mile lining life, says Ausco.

• Reports on European and English braking systems with emphasis on disc and anti-skid brakes by J. W. Kinchin of England and Hans Strien from Germany.

 Favorable reports on Chevrolet's Corvair and Ford's Econoline compact trucks by American Telephone & Telegraph's John MacDougall. He says AT&T has 500 in use, could add at least 3000 this year. With slight improvement, he adds, AT&T might find use for 30,000 to 40,000

 Analysis of field tests of transistorized ignition from Electric Autolite. One result of the tests: An improved coil design.

• Details on Delco-Remy's transistorized voltage regulator. They were included in a special nine-man report, "Truck Electrical System Reliability." It should be in every fleetman's reference file. It's available at nominal cost from Society of Automotive Engineers, 483 Lexington Ave., New York 17, N. Y. Ask for it by title and number (SP-188).

• Several discussions on batteries. General conclusion: Fuel cells are still "in the future," nickel-cadmium batteries may be the answer for applications, present leadacid batteries are the basic answer for the foreseeable future.

• Three reports on wire cord tires. They noted the advances made in the design and manufacture of this type of tire, said cost was biggest hurdle to overcome. Even so, for some applications, they're worth the premium.

 Discussion and display of what epoxy adhesives can mean in vehicle manufacture. Biggest possibility is to glue the entire body together. They can be used to join dissimilar metals in place of welding—without resulting electrolytic corrosion. Bonds can be made with 10,000 psi tensile, 5500 psi shear strength.

• Container discussion centering on standardization and interchange. Important point made by Bert Ogden of Consolidated Freightways is that they permit less payload weight than a standard trailer . . . therefor must cut freight handling costs if they're to find general use in fleet operations aside from specialized applications.

• A special report by E. N. "Bing" Hatch on bus operation. He predicts in the next 10 years (a) a yearly increase in bus registrations of 17-18 per cent—largely school buses, (b) average miles per bus to drop below 15,000 per year, (c) transit bus operating and maintenance expenses will go up by at least 10¢ a mile, (d) a fairly constant passenger load "with possibly some increases," (e) transit bus revenue-per-mile of 80¢ on the average.

(TURN TO PAGE 206, PLEASE)



MT-630 Battery Charger. Yours on easy payments.

SNAP-on asked shop owners and mechanics all over the country what features they wanted most in a top-quality battery charger. Then SNAP-on built these features into the new MT-630 battery charger. Here they are:

Simple to Operate Even your greenest mechanic can operate it with ease. General instructions are printed on control panel. Complete instructions in easy-to-read booklet.

Double Duty Use it for a quick charge or a slow, overnight trickle charge. Handles 6- or 12-volt batteries.

Automatic Thermo Breaker Protects charger from overheating.

Rugged and Waterproof Completely encased for outdoor use. Cover protects controls from weather and from damage if heavy object falls on charger. Fan sucks in air from side instead of top—no excessive moisture intake.

Automatic Timer with 4 Charging Rates Set it and forget it — high, medium, and low for fast charge; trickle for slow charge.

Color-Coded Ammeter Green and red zones show normal and excessive charging.

Replaceable Inserts for Clamps Solid copper (not just plated) inserts can be removed and replaced — saves cost of replacing entire clamp.

Guarantee SNAP-ON selenium-type charger is guaranteed a full year against defective materials and workmanship. With proper use, it should last for years.

Save time and money with this top-quality SNAP-ON charger. If you've only got one charger — add an extra one. Customers tell us it pays for itself over and over. Get all the facts from your SNAP-ON man.



8026-B 28TH AVENUE

KENOSHA, WISCONSIN



MT-340A Battery Tester. For 6- and 12-volt systems. Automatic relay system protects battery from overload during testing.



KRA-440 Cart. Heavy-duty unit that holds both a battery and the charger. Saves time, saves muscle.

February News Roundup

Continued from page 204

Ton-mile tax plan for "piggyback"?

SALEM, ORE .- A tax on trailers moving on "piggyback" is one of the preliminary recommendations of the state's Interim Committee on Taxation. The recommendation is "to keep this class of property in line with other classes of property through a property tax or weight-mile tax."



Georgia Public Service Commission, in announcing a series of actions involving motor carrier inspection and enforcement, notes, "These arrests are part of a stepped-up motor carrier enforcement program . . ."

Massachusetts-requires vehicle in-

surance policies to contain arbitration provision relating to physical damage to vehicles (H.2928).



Dan Dugan Oil Transport Co., Mandan, N. D., announced recently that 26 drivers received National Safety Council Safe Driving Awards for records ranging from two to 11 years. Besides safe driving awards, Fleet Owners' Maintenance Efficiency Awards were presented to members of the company's shop crew.

Miller Motor Express, Charlotte, N. C., recently gave top honors for safe driving to four drivers with 13year safety records. Awards went to 25 more men with accident-free records of from eight to 12 years.

Bruce Motor Freight, Inc., and Bruce Transfer & Storage Co., Des Moines, Iowa, paid cash bonuses to 226 drivers for driving without chargeable accidents during the year ended in Sept. 1960.

Eastern Express, Inc., Terre Haute, Ind., presented awards to more than 600 drivers in 1960 for accident-free driving records of from one to 13 years. Presentations were made at 18 award dinners held at the end of the year. Wives of the honored drivers received charm bracelets to which are attached replicas of Eastern trucks.



Aunt Fanny's Baking Co., Atlanta, Ga.-Six Model No. H67T cab-overengine tractors with 170-hp Thermodyne diesel engines from Mack Trucks, Inc., Plainfield, N. J.

More details? Circle 332 on reply card

Baltimore Transfer-Motor Freight Express System, Baltimore, Md. -100 International Harvester trucks as part of a fleet expansion and replacement program. Purchase includes 40 Model No. BC-225-DL tractors, 25 Model No. VCO-205 tractors, 25 Model (TURN TO PAGE 208, PLEASE)

TULSA PRODUCTS DIVISION VICKERS INCORPORATED ivision of Sperry Rand Corporation 731 E. First Street TULSA 20, OKLAHOMA



INSTALL AND FORGET

It's that simple . . . install and forget the Tulsa Power Take-Off, with full assurance of its complete dependability and long life. Tulsa Power Take-Offs are lighter, stronger, quieter-yet competitively priced. They're always available - for practically any application - through the salesservice facilities of our world-wide dealers and distributors. Ask for a "TULSA" Power Take-Off by name!

Published in the Interest of Safe

Baird Bus and Truck News

Clear and Dry

Baird Dynamic Corp., 1700 Stratford Ave., Stratford, Con-

REVOLUTIONARY NEW SURFACING FOR WORK **BUS AND TRUCK STAIR TREADS PROVIDES MAX-**IMUM SAFETY FOR PASSENGERS AND DRIVERS

SP-10 Plastic Filler Cures in Minutes, Sets Flexible and Firm



Plastic Sealer and Grip-**Grit Combination Provides** Non-Skid, Durable Surface

For use on worn stair well and aisle treads on all types of public and school busses. SP-10 cures in minutes and eliminates slippery "step" or "walk" areas where many accidents occur.

Baird spokesmen pointed out that SP-10 is also ideal for driver protection on chemical and petroleum trucks, refrigerated trailers and on all general types of trucks. It can be used on steps, stair wells, plat-forms and catwalks. It provides greater safety wherever drivers or loaders and helpers work.

Specially Prepared Abrasive Material Adds To Non-Slip Effectiveness of SP-10

Grip-Grit, when added to SP-10 Plastic Sealer provides a safe, long lasting, non-skid surface. The material is abrasive which consists of tough, elastic, multi-planed

grains which resist wear and /will not shatter or break. Developed and tested in Baird Dynamic's laboratories, Grip-Grit has been proven most effective.

Laboratory Tests Prove That SP-10 Is Non-Toxic, Fast, Safe To Use

Certain types of chemical materials, it has been demonstrated, irritate the hands and face when mixing, and have a toxic reaction on the person applying the material.

Exhaustive tests show this is not the case with new SP-10 Plastic Filler. It is simple, easy to apply and requires no special training on the part of the user.

Insurance Companies Impressed With Safety Features of SP-10

Insurance companies are reported to be taking a second look at the safety angles of new SP-10. It is said that the low-cost surfacing material might very well mean a reduction of accident insurance rates for various types of transportation lines.

Baird President Announces New, Important Development

Reports Introduction of SP-10, A New Flexible Plastic Sealer for Rebuilding and Repairing Worn and Dangerously Smooth Bus and Truck Stair Treads.

Mr. Brewer Lindberg, President of Baird Dynamic Corporation, manufacturers of FILLERite Plastic Paste for autobody re-pair, announced recently the introduction of SP-10, a new development in the miracle resin field. SP-10 consists of two component parts: SP-10 Plastic Sealer Resin, a medium-heavy liquid, and SP-10 Plastic Sealing Catalyst, a colorless liquid hardener. Mixed in proper proportions, SP-10 forms a tough, positive adhering, flexible



treme lemperature changes and vibration. forms a tough, positive adhering, flexible surface practically impervious to wear, ex-

Connecticut Bus Company Sees Greater Passenger Safety And Easier Maintenance With New Tread Surfacing Material

Mr. Charles W. Scheckart, Maintenance Superintendent for the Connecticut Company. States His Company Is Pleased With Extensive Test Results On New SP-10 Plastic Sealer

Mr. Scheckart reports, "Now we can repair treads in minutes without tying up vehicles for days on end. We don't have to replace entire steps or rely on 'tacked-on' step coverings which rip or buckle. Smooth treads are covered quickly with SP-10, and the material wears like iron. The Grip-



Grit surface eliminates the danger of passengers slipping or falling, too.

Only Four Simple Steps Needed To Apply New Step Treads







After application and The completed a before SP-10 cures, tread—inexpensi sprinkle extra Grip- tough, long wear Grit on surface for Sale and good-look



Safety Clinics Planned To Demonstrate SP-10

Baird Dynamic has announced plans to hold a series of Safety Clinics in all im-portant principal cities across the country within the next few months. Safety and Maintenance Engineers of all leading bus and truck operating organizations will be invited to attend meetings where SP-10 will be actually demonstrated by Baird Factory Representatives.

Interested persons are requested to write for the time and place of the Safety Clinic scheduled for their areas.

Sales Territories Open For Fleet Supply Houses

Supply houses specializing in selling to fleet operators, interested in appointment fleet operators, interested in appointment as an SP-10 distributor may write directly to the manufacturer for details: Baird Dynamic Corp., 1700 Stratford Avenue, Stratford, Connecticut.

Descriptive Literature Available

Write Baird Dynamic for complete literature on SP-10 Plastic Sealer.

February News Roundup

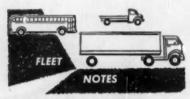
Continued from page 206

No. BC-162 straight trucks and 10 Model No. BC-174 straight trucks. More details? Circle 333 on reply card

Atlas Ready-Mix, Inc., Minot, N. D.

-Eight International Harvester model No. VF-192 trucks as part of a fleet expansion and modernization program.

More details? Circle 334 on reply card



Sentinelkote Corp., Chicago, applies epoxy resin to road surfaces to seal them against effects of oil, salts and other deteriorating agents. The seal must be applied evenly over the road surface at 100 deg F at the rate of 85 ft per min. The company uses a 1961 Chevrolet truck with 6-cyl engine to do the job. It's said to have

the ideal transmission ratio with low-speed torque. The truck is able to operate up and down hill at a steady speed of less than one mile an hour.

Carolina Freight Carriers, Cherryville, N. C., says it has switched from gasoline engines to Cummins "Stop & Go" diesels. The switch is said to save the company \$1000 per year per truck in shuttle-run delivery of general freight.

Great Lakes Express, Saginaw, Mich., was honored by leaders of the Saginaw County United Fund Drive for 100 per cent participation in the 1960 fund drive. Increase in the company's total gift was 236 per cent greater than its total for 1959.

Short Way Lines, Inc., Toledo, Ohio, has installed mobile radio telephones on two of its intercity buses as a new convenience for passengers. More vehicles will be equipped with 'phones later.

Greco Contractors, Inc., Rosemont, Ill., has equipped a 1957 Mack tractor with the new Caterpillar Model No. 1673 truck diesel. The 220-hp die-(TURN TO PAGE 212, PLEASE)



Travel any street or highway in America . . . everywhere you go you'll see trucks identified and decorated with Meyercord Decal Truck Signs. Like thousands of other trucks . . . your own fleet can "sell" your husiness to the public every hour of the day . . . whet acks become "moving billboards" promoting your ...m name and message. You can do the job best with Meyercord Decal Truck Signs. One of the great advantages is complete uniformity of design and color on every vehicle in the fleet.



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MITH COLOR-GARDI
All Meyercord Decal Truck
Signs now have the added
protection of our exclusive
laboratory development,
COLOR-GARD—the toughest, most durable "clear" ever
produced for the decal and
transferable film industry!

"ADS ON WHEELS" Full-Color Brochure Free on Request. Drop us a line on your firm's letterhead . . for full color illustrated brochure.



- extend engine life

 STOPS CARBON BUILD-UP
- . STOPS STICKING VALVES
- . STOPS RING WEAR
- . STOPS CORROSION
- STOPS SLUDGE AND VARNISH

LUBAL BLENDING AGENTS used in diesel fuel, gasoline and lubricating oil will minimize down time and excessive overhauls. They are specifically compounded to eliminate the causes of pre-ignition, remove carbon abrasives in the fire zone area, and thoroughly lubricate the critical upper cylinder area. Use LUBAL for bulk treatment or for individual engines.

MONEY BACK GUARANTEE

USE LUBAL FOR 3 MOS.

Convince yourself . . . LUBAL will improve and increase gasoline and diesel engine performance . . . or your money back. Write for full details and OUR NEW BROCHURE.



More details? Circle 265 on reply card

ACTUAL TESTS PROVE:

NEW STOPMASTER BRAKE IS the most advanced brake design in 30 years!

Over three years of thorough and demanding road tests have proven the superiority of the new Rockwell-Standard Stopmaster Brake. Of its many new improvements the Stopmaster incorporates these major advantages to meet the modern trucking industry's demand for a more efficient, more dependable brake.

New Stopmaster actuation principal results in higher braking efficiency with less input. In dual actuation design both shoes do an equal

entire lining surface. This balanced shoe action assures more dependable service; faster, surer stops; less maintenance.

amount of work over the

New Stopmaster 15" ciameter permits increased air circulation between brake drum and wheel rim. This results in cooler operating temperatures ... less heat fade, longer lining life, longer drum life. Smaller diameter means less weight.

AVERAGE RESULTS OF NUMEROUS HIGHWAY VEHICLE TESTS PROVE: 35% lighter weight.

38% less heat fade. safer, more operation!

safer, more continuous

capacity!

more payload

57% less air volume required. permits smaller air reservoir tankel 56% longer lining life. lower operating con less maintenance!

lower operating cost,

56% longer drum life., more dependability. less downtime!

66% less adjustment required. 37% less service parts

greater safety, reduced maintenance!

The Stopmaster 15" Brake is available with either air or hydraulic actuation . . . also up to 30" diameter, with hydraulic actuation for heavy-duty, off-highway vehicles.

smaller inventories, less expensive!

Another Product of ...

ROCKWELL-STAND CORPORATION



Brake Division.

Ashtabula, Ohio

Famous WHITE quality

An all-new concept in economy-design, these big new WHITE 4200S Series models are specially engineered to solve the problem of rising operational costs and to provide maximum payload ability.

Lighter in weight, yet rugged all the way through, these models have high-strength, heat-treated alloy steel frames, quality nut and bolt construction, and extra capacity drive components.

The WHITE 4200S Series is built to handle the toughest jobs with less down

time, lower operating and maintenance costs. And at a lower price than ever!

These new White heavy-duty models are the biggest truck values on the market. Built to your exact operating requirements. And designed to give you the competitive edge you need to lower your costs—increase your profit—in '61. Call your White Branch or Distributor today!

THE WHITE MOTOR COMPANY, CLEVELAND 1, OHIO

Branches, distributors, and dealers in all principal cities

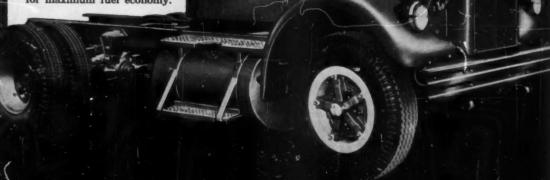
WORLD LEADER IN

HEAVY DUTY TRUCKS

WHITE

4200TS

This "Payload Special" handles big payloads at lowest possible costs. Less chassis weight. Better load distribution. Available with famed Super Mustang gas or Cummins "C" Series diesel engines for maximum fuel economy.



at a NEW LOW PRICE...

4200S

Powered for heavy-duty truck operations. Available with famed Super Mustang gas or Cummins "C" Series diesel engines for maximum fuel economy.

42645

Flexibility in selection of components permits you to tailor the White 4264S to meet your specific operating requirements. Standard components are set up to handle 5 to 6 yard mixer loads; optional components provide for even greater payloads. Available with White Super Mustang gas or Cummins "C" Series diesel engines for maximum fuel economy.



Engler

for

- Preventive Maintenance
- Leasing or Rentals
- Interchange of Equipment
- Warranty Programs

Over 10 years of fleet acceptance and field experience have proven Engler Hubodometers the accepted method of the industry for measuring mileage accurately and continuously. Hermetically sealed units provide complete and controlled registering of all commercial vehicle mileage and are ruggedly built for years of dependable service. Engler Hubodometers are also available on new equipment at all truck, trailer, and bus manufacturers.

OTHER INSTRUMENTS

WRITE

FROM ENGLER

for descriptive literature.



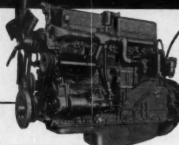
Instrument Company

250 Culver Avenue, Jersey City, New Jersey

Phone: HEnderson 4-6500

More details? Circle 232 on reply card inside back cover

CONTINENTAL RED SEAL POWER



FOR RUGGED STAMINA ECONOMY LONG LIFE

THIRTY-SIX
TRANSPORTATION
ENGINES
ARE AVAILABLE

Thirty-one gasoline models, from 26 to 300 horsepower—five Diesel models, from 66 to 225 horsepower. For nearly 60 years, Continental Red Seal transportation engines have found wide acceptance in the really tough jobs where extra stamina is a prime consideration—in heavy-duty highway trucks and tractors, both as original equipment and as replacements for other makes, in buses, taxicabs, door-to-door delivery vehicles, transport mixers and the like.



Continental

Motors Corporation

MUSKEGON . MICHIGAN

February News Roundup

Continued from page 208

50

sel is averaging 190 miles daily hauling excavation material on the Northwest Expressway job in Chicago.

Ringsby Truck Lines, Inc., Denver, Colo., recently announced a new profit sharing and retirement program for its employees. The plan is totally dependent upon operating profits, rather than employee contribution.

Gateway Transportation Co., La Crosse, Ind., recently won a first place award for an "Outstanding Direct Mail Campaign" at the annual international contest held by the Direct Mail Advertising Assn.



Transicold Corp., Los Angeles, Cal., has opened a new factory service branch at 5140 West 73rd St., Chicago, for the installation and service of Transicold trailer and Kold-Trux straight truck refrigeration units. Joseph A. Kirk is manager of the new branch.

Chrysler Corp., Detroit, announces the appointment of William J. Bird as director of the Fleet Sales Division.

Highway Equipment Sales, Inc., El Monte, Cal., is now using Mechanix wheel oil seals in the manufacture of all its custom-built trailers.

Gould-National Batteries, Inc., St. Paul, Minn., has introduced a new line of oil, air and fuel filter elements for automobile, diesel and tractor requirements.

Diesel Service Corp., Mt. Holly, N. J., has been appointed a dealer for the Swedish Volvo Diesel Trucks.

Montone Mfg. Co., Hazleton, Pa., now includes Mechanex wheel oil seals as standard equipment on all Montone trailers.

General Motors' Detroit Diesel Engine Division announces that its authorized service outlets now provide certified engine test reports on overhauls performed by them.

THE ORIGINAL SPRAY STARTING FLUID*



· Starts diesel and gasoline engines (from the smallest to the largest) down to 65° F. below zero . Starts in seconds . Excellent in humid weather too . Millions of cans sold . See your automotive jobber

*The inventors of spray starting fluid. Patent No. 2,948,595

Ask for the can with the "balky donkey"

SPRAY PRODUCTS CORPORATION P.O. Box 1988 . Camde



More details? Circle 227 on reply card inside back cover



. they may look the same, when put to actual test, there is a BIG DIFFFRENCE always Supply a

WOHLERT WATER PUMP SELL THE BEST ... SELL WOHLERT



LANSING S MICHIGAN

More details? Circle 226 on reply card inside back cover

Change Passenger & Light Truck Tires

the POWER way

WITH A

Bishman 880-61

Electric-Air TIRE CHANGER

Triple Power ends backbreaking labor, increases productivity: mount-demount in seconds electrically, break both beads by air, together or sepa-rately.



Holds all wheels and demountable rims 12-171/2" Just lay the wheel on the machine and tighten the chuck. Powerful chuck jaws grip rim and center wheel automatically. No attachments or accessories necessary.

BISHMAN No. 880-61 Electric-Air Tire Changer.

Ask your automotive equipment distributor, or write direct.

Bishman MANUFACTURING CO.

More details? Circle 225 on reply card inside back cover COMMERCIAL CAR JOURNAL, February, 1961



. . . already the largest selling original equipment turn signal!

SIGNAL

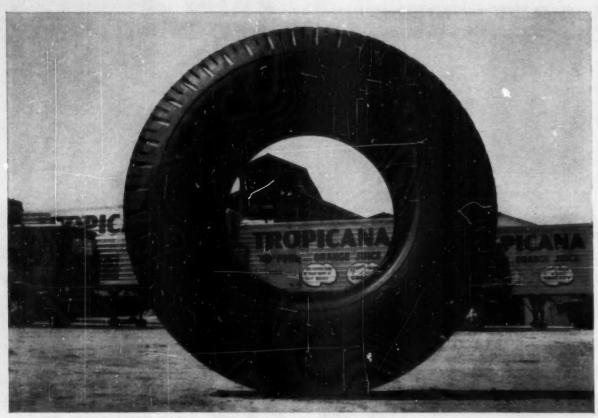
Delivers maximum light output from center to rim of acrylic fade-proof lens; exceeds SAE optic and identification requirements.



- 4 models: Single or double face (red and/or amber lens); in lacquered aluminum or chrome finish.
- Simple 4-part design (body, bulb socket, lenses) makes servicing easy, economical.
- Baffle plate in double-face model blocks "shine-through" from sun; insures full signal brilliance day or night.
- Streamlined, lightweight and watertight with snap-grip lens and "O" ring gasket; zinc diecast body and brass socket are non-corrosive.

DIETE	Syracuse 1, N. Y., Dept. 12
	Please send details on your #275 Turn Signal
Name	Title
Company	
Business Address	
City	Zone State

More details? Circle 172 on reply card inside back cover



"Cooper Road-Master Extra Mile tires are out front in mileage and trouble-free service", says
Tropicana Products, Inc., Bradenton, Florida, Note Tropicana hauling units at loading terminal in background.

Switch to Cooper Road-Master tires doubles mileage for Tropicana Products

Tropicana Products is one of Florida's leading producers of orange juice and other citrus foods. A fleet of 150 tractor and trailer units are constantly on the road. Two drivers are assigned to each hauling unit, work in shifts around the clock. Driving conditions vary from high turnpike speeds one day to steep and winding mountain roads the next. Even a short road delay can be costly with a perishable citrus cargo aboard. Trouble-free tire performance is absolutely essential.

Cooper Tires Save Money

Tropicana switched to Cooper Road-Master Extra Mile tires because: (1) They are built with a new safety-siped Hi-Carbon tread to deliver both extra traction and extra original mileage. (2) They are equally efficient for use on both drive wheels and trailer wheels. (3) Exclusive Cooper Shock-Guard construction guarantees a practically damage-proof tire body, plus more bonus recaps. Tropicana's Executive Vice Pres., E. H. Price, Jr., reports: "Cooper Road-Master Extra Mile tires average more than 120,000 original and recap miles on our hauling units. This is double the mileage obtained from any other brand we have used. And these Cooper tires have virtually eliminated costly failures and road delays for us."

Lower Initial Cost, Too

You can be sure that the extra original and recap mileage you get with Cooper Road-Master Extra Mile tires will save you money. And you save even more because Cooper truck tire prices are consistently the best available. See your Cooper truck tire dealer. Or write Dept. 118 for complete details today. Cooper Tire & Rubber Co., Findlay, Ohio.



M. H. Lackey, Jr. (standing) Supt. of Maintenance and Jack Steele (kneeling left) Supt. of Transportation, talk double-mileage with Howard Mitchell, Cooper Rep.



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For fast, dependable auto glass replacement



... see your AID Dealer

You can't afford to have cars, buses, or trucks out of service because of broken glass. When you need safety glass replaced in a hurry, see your Autoglass Installation Dealer (AID). Not only will you get speedy service, you'll get auto glass of the highest quality (because it's made by PPG), installed by skilled workmen who specialize in replacing safety

glass. Your vehicle will be back on the road earning money sooner if you see an AID dealer.

AID shops are identified by the distinctive green and white sign. Look for it; it is your guide to reliable auto glass service. Look for this emblem, or consult the Yellow Pages of your phone book for the name of the AID dealer nearest you.



All PPG Automotive Safety Glass complies with every recognized safety code.

Pittsburgh Plate Glass Company

Paints · Glass · Chemicals · Fiber Glass In Canada: Canadian Pittsburgh Industries Limited



for quick product information



Leave the reply cards at right foll.

Turn to the first page of the WHAT you have to do is circle on one of the of the items that interest you—the mail. CCJ does all the rest. We'll s reaches the right person—at no cos

Same free service applies to the padvertisers in this issue. For further circle on the same reply card the adjacent to the ads about the prolike to know more about.

to find out is as easy as

And—if there's some problem given ache, don't reach for the aspirin. U at the right instead. It puts CCJ's thelping to find the answer to your questions.

To help us celebrate our 50th anniversary, will you celebrated your fleet's 50th anniversary.



in publications for f

Interim report on a test of liquid nitrogen refrigeration system installed in a frozen food delivery truck is available to fleet operators. The system is said to maintain low temperatures in reefer trucks by controlled spraying of liquid nitrogen at a temperature of 320 deg below 0 on top of the load of frozen food. Performance and characteristics of the system are discussed in the report (Form No. AMS-426). For further details, write directly to Agricultural Marketing Service, Transportation and Facilities Research Division, U. S. Department of Agriculture, Washington 25, D. C.

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Truck and trailer safety accessories made by Bustin Steel Products, Inc., Dover, N. J., are shown in the company's latest catalog (No. TR-12).

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Fork-lift trucks in five heavy-duty models for handling van-sized shipping containers are described in a new brochure from Clark Equipment Co., Battle Creek, Mich.

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Canvas products and other materials made possible by the development of new textile fibers, finishes and coatings are subject of a 16-page booklet from Wellington Sears Co., New York City. "Protective Cover Fabrics" will serve as a reference guide to the various materials you need for cargo and equipment protection in your fleet operation.

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Motor oil testing is said to be fast and efficient with the new Simplex portable motor oil testing kit that's described in a brochure from Lengor, Inc., Annapolis, Md.

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Carbon monoxide disposal from fleet shops and garages is the subject of a catalog just released by Car-Mon Products, Inc., Chicago. Four types of carbon monoxide exhaust through underground or overhead systems are described. For free copy, circle 385 on reply card

Stainless-steel floor plate and its safety and economy features are illustrated in a booklet (Form No. 152) just published by Eastern Stainless Steel Corp., Baltimore, Md.

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"Look! Stop Backing Accidents" is the title of a new fleet safety program planned by National Safety Council, Chicago. A kit is available containing a manual for the fleet safety supervisor with outlined details of a six-week accident prevention campaign. The campaign is aimed at reducing backing accidents among your drivers. Also included are display posters, dash stickers and a booklet for drivers containing the five basic rules to stop backing accidents.

For further details, circle 387 on reply card

Shop hints for efficient splicing of tread rubber are the subject of Bulletin No. 11 from the Retread and Repair Materials Committee, Rubber Manufacturers Assn., New York City. It gives details on splicing either natural or man-made tread rubber in retreading and repairing tires.

To get your free copy, circle 388 on reply card

The best ways to watch vehicle weight in your truck fleet operations are explained in a new booklet from the Scale Manufacturers Assn., Washington, D. C. "Suggestions for the Selection, Installation and Maintenance of Motor Truck Scales" is both title and subject matter for the publication.

To get free booklet, circle 389 on reply card

Permanent repair of tubeless tires using either hot or cold vulcanizing methods is explained in a brochure just published by H. B. Egan Mfg. Co., Muskogee, Okla. It's titled "Methods of Tubeless Tire Repairing."

To obtain free brochure, circle 390 on reply card

Safety-tread-steel plate for fleet maintenance applications is subject matter for the just-published booklet, "63 Practical Ideas in Easy Truck Maintenance and Repair," from Inland Steel Co., Chicago. New and varied ideas for use of safety plate throughout your fleet shop are given, along with how-to-do-it instructions.

For your free copy, circle 391 on reply card

Aids for screening driver applicants and simplifying fleet operations are available from Barry Cleveland Systems Corp., Cleveland, Ohio. White Motor Co.'s Driver Training Systems consist of driver selection and training forms, cost record books and a comprehensive driver's manual.

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Standard ICC-approved forms for fleets operating under the National Motor Equipment Interchange agreement are now available. The recently revised Trailer Interchange Receipt and Safety Inspection Report forms may be obtained from the National Motor Equipment Interchange Committee, Washington, D. C. Quantity lots may be ordered with or without company name imprinted. The Seal of the Committee is overprinted on each copy to identify it as the standard form.

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